

Erdogan Kiran

List of Publications by Year in descending order

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100
papers

3,145
citations

172457

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175258

52
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106
all docs

106
docs citations

106
times ranked

2181
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Formation of polymer particles with supercritical fluids: A review. <i>Journal of Supercritical Fluids</i> , 2005, 34, 287-308. | 3.2 | 496 |
| 2 | Foaming of polymers with supercritical fluids and perspectives on the current knowledge gaps and challenges. <i>Journal of Supercritical Fluids</i> , 2018, 134, 157-166. | 3.2 | 168 |
| 3 | Supercritical fluids and polymers – The year in review – 2014. <i>Journal of Supercritical Fluids</i> , 2016, 110, 126-153. | 3.2 | 136 |
| 4 | Pyrolysis-molecular weight chromatography: A new on-line system for analysis of polymers. II. Thermal decomposition of polyolefins: Polyethylene, polypropylene, polyisobutylene. <i>Journal of Applied Polymer Science</i> , 1976, 20, 2045-2068. | 2.6 | 119 |
| 5 | Miscibility, density and viscosity of poly(dimethylsiloxane) in supercritical carbon dioxide. <i>Polymer</i> , 1995, 36, 4817-4826. | 3.8 | 108 |
| 6 | Volumetric Properties of Carbon Dioxide + Ethanol at High Pressures. <i>Journal of Chemical & Engineering Data</i> , 1997, 42, 384-388. | 1.9 | 95 |
| 7 | Polymer miscibility, phase separation, morphological modifications and polymorphic transformations in dense fluids. <i>Journal of Supercritical Fluids</i> , 2009, 47, 466-483. | 3.2 | 74 |
| 8 | Modeling polyethylene solutions in near and supercritical fluids using the sanchez-lacombe model. <i>Journal of Supercritical Fluids</i> , 1993, 6, 193-203. | 3.2 | 61 |
| 9 | Volumetric Properties of Carbon Dioxide + Acetone at High Pressures. <i>Journal of Chemical & Engineering Data</i> , 1997, 42, 379-383. | 1.9 | 60 |
| 10 | Miscibility, phase separation, and volumetric properties in solutions of poly(dimethylsiloxane) in supercritical carbon dioxide. <i>Journal of Applied Polymer Science</i> , 2000, 75, 1397-1403. | 2.6 | 57 |
| 11 | Foaming strategies for bioabsorbable polymers in supercritical fluid mixtures. Part I. Miscibility and foaming of poly(L-lactic acid) in carbon dioxide+acetone binary fluid mixtures. <i>Journal of Supercritical Fluids</i> , 2010, 54, 296-307. | 3.2 | 57 |
| 12 | Volumetric Properties of Pentane + Carbon Dioxide at High Pressures. <i>Journal of Chemical & Engineering Data</i> , 1996, 41, 158-165. | 1.9 | 47 |
| 13 | Morphological changes in poly(ϵ -caprolactone) in dense carbon dioxide. <i>Polymer</i> , 2008, 49, 1853-1859. | 3.8 | 47 |
| 14 | Interaction of supercritical fluids with lignocellulosic materials. <i>Industrial & Engineering Chemistry Research</i> , 1988, 27, 1301-1312. | 3.7 | 46 |
| 15 | A new experimental system to study the temperature and pressure dependence of viscosity, density, and phase behavior of pure fluids and solutions. <i>Journal of Supercritical Fluids</i> , 1990, 3, 91-99. | 3.2 | 46 |
| 16 | Prediction of high-pressure phase behaviour in polyethylene/n-pentane/carbon dioxide ternary system with the Sanchez-Lacombe model. <i>Polymer</i> , 1994, 35, 4408-4415. | 3.8 | 46 |
| 17 | Solubility of polyethylene in n-pentane at high pressures. <i>Polymer</i> , 1992, 33, 5259-5263. | 3.8 | 45 |
| 18 | Solubility and demixing of polyethylene in supercritical binary fluid mixtures: Carbon dioxide-cyclohexane, carbon dioxide-toluene, carbon dioxide-pentane. <i>Journal of Applied Polymer Science</i> , 1993, 47, 895-909. | 2.6 | 44 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Copolymerization of Acrylonitrile with Methyl Methacrylate and 2-Chlorostyrene in Supercritical CO ₂ . <i>Macromolecules</i> , 2004, 37, 8239-8248. | 4.8 | 43 |
| 20 | Viscosity, Density and Excess Volume of Acetone + Carbon Dioxide Mixtures at High Pressures. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 5453-5462. | 3.7 | 43 |
| 21 | High-pressure phase behavior in polyethylene/n-butane binary and polyethylene/n-butane/CO ₂ ternary systems. <i>Journal of Applied Polymer Science</i> , 1994, 53, 1179-1190. | 2.6 | 41 |
| 22 | Foaming of polymers with carbon dioxide – The year-in-review – 2019. <i>Journal of Supercritical Fluids</i> , 2021, 173, 105166. | 3.2 | 37 |
| 23 | High-pressure viscosity and density of poly(methyl methacrylate)+acetone and poly(methyl Tj ETQq1 1 0.784314 r _g BT /Overlock 10 Tj | 3.2 | 34 |
| 24 | Melting behavior of biodegradable polyesters in carbon dioxide at high pressures. <i>Journal of Supercritical Fluids</i> , 2012, 72, 278-287. | 3.2 | 33 |
| 25 | High-pressure light scattering apparatus to study pressure-induced phase separation in polymer solutions. <i>Review of Scientific Instruments</i> , 1998, 69, 1463-1471. | 1.3 | 32 |
| 26 | Foaming strategies for bioabsorbable polymers in supercritical fluid mixtures. Part II. Foaming of poly(ϵ -caprolactone-co-lactide) in carbon dioxide and carbon dioxide+acetone fluid mixtures and formation of tubular foams via solution extrusion. <i>Journal of Supercritical Fluids</i> , 2010, 54, 308-319. | 3.2 | 32 |
| 27 | Comparison of Sanchez–Lacombe and SAFT model in predicting solubility of polyethylene in high-pressure fluids. <i>Journal of Applied Polymer Science</i> , 1995, 55, 1805-1818. | 2.6 | 31 |
| 28 | Kinetics of pressure-induced phase separation (PIPS) in solutions of polydimethylsiloxane in supercritical carbon dioxide: crossover from nucleation and growth to spinodal decomposition mechanism. <i>Journal of Supercritical Fluids</i> , 1999, 16, 59-79. | 3.2 | 31 |
| 29 | Volumetric Properties of Carbon Dioxide + Toluene at High Pressures. <i>Journal of Chemical & Engineering Data</i> , 1996, 41, 482-486. | 1.9 | 29 |
| 30 | Miscibility, density and viscosity of polystyrene in n-hexane at high pressures. <i>Polymer</i> , 1997, 38, 5185-5193. | 3.8 | 29 |
| 31 | Inclusion complex formation of β -cyclodextrin and Naproxen: a study on exothermic complex formation by differential scanning calorimetry. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2013, 77, 269-277. | 1.6 | 29 |
| 32 | High-pressure viscosity and density of polyethylene solutions in n-pentane. <i>Journal of Applied Polymer Science</i> , 1995, 58, 2307-2324. | 2.6 | 28 |
| 33 | High-Pressure Viscosity and Density of Polymer Solutions at the Critical Polymer Concentration in Near-Critical and Supercritical Fluids. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 6354-6362. | 3.7 | 28 |
| 34 | Volumetric properties of ethyl acetate+carbon dioxide binary fluid mixtures at high pressures. <i>Journal of Supercritical Fluids</i> , 2012, 61, 9-24. | 3.2 | 28 |
| 35 | A new experimental system for combinatorial exploration of foaming of polymers in carbon dioxide: The gradient foaming of PMMA. <i>Journal of Supercritical Fluids</i> , 2016, 109, 1-19. | 3.2 | 28 |
| 36 | The kinetics of thermal decomposition of 1-alkyl-3-methylimidazolium chloride ionic liquids under isothermal and non-isothermal conditions. <i>Thermochimica Acta</i> , 2020, 685, 178509. | 2.7 | 26 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Effect of polydispersity on the demixing pressures of polyethylene in near- or supercritical alkanes. Journal of Supercritical Fluids, 1994, 7, 283-287. | 3.2 | 25 |
| 38 | Pressure-Induced Phase Separation in Polymer Solutions: Kinetics of Phase Separation and Crossover from Nucleation and Growth to Spinodal Decomposition in Solutions of Polyethylene in n-Pentane. Macromolecules, 2001, 34, 3060-3068. | 4.8 | 25 |
| 39 | Miscibility, viscosity and density of poly (ϵ -caprolactone) in acetone+CO ₂ binary fluid mixtures. Journal of Supercritical Fluids, 2006, 39, 192-200. | 3.2 | 25 |
| 40 | High-pressure solution blending of poly(ϵ -caprolactone) with poly(methyl methacrylate) in acetone+carbon dioxide. Polymer, 2008, 49, 1555-1561. | 3.8 | 25 |
| 41 | Solubility of polystyrenes in supercritical fluids. Journal of Supercritical Fluids, 1988, 1, 37-44. | 3.2 | 24 |
| 42 | Foaming of polystyrene and poly(methyl methacrylate) multilayered thin films with supercritical carbon dioxide. Journal of Supercritical Fluids, 2019, 145, 243-252. | 3.2 | 24 |
| 43 | Thermal and spectral characterization and stability of mixtures of ionic liquids [EMIM]Ac and [BMIM]Ac with ethanol, methanol, and water at ambient conditions and at elevated temperatures and pressures. Thermochimica Acta, 2018, 669, 126-139. | 2.7 | 23 |
| 44 | ESTIMATION OF CRITICAL PROPERTIES OF BINARY MIXTURES USING GROUP CONTRIBUTION METHODS. Chemical Engineering Communications, 1990, 94, 131-141. | 2.6 | 22 |
| 45 | Volumetric Properties of Carbon Dioxide + Sulfur Hexafluoride at High Pressures. Journal of Chemical & Engineering Data, 1996, 41, 354-360. | 1.9 | 22 |
| 46 | Thermoreversible Gelation and Polymorphic Transformations of Syndiotactic Polystyrene in Toluene and Toluene + Carbon Dioxide Fluid Mixtures at High Pressures. Macromolecules, 2008, 41, 7525-7535. | 4.8 | 22 |
| 47 | Miscibility and Phase Separation of Polymers in Near- and Supercritical Fluids. ACS Symposium Series, 1997, , 2-36. | 0.5 | 21 |
| 48 | Solubility and diffusivity of CO ₂ and N ₂ in polymers and polymer swelling, glass transition, melting, and crystallization at high pressure: A critical review and perspectives on experimental methods, data, and modeling. Journal of Supercritical Fluids, 2022, 185, 105378. | 3.2 | 21 |
| 49 | Polymer Formation, Modifications and Processing in or with Supercritical Fluids. , 1994, , 541-588. | | 20 |
| 50 | High-pressure density and viscosity of polystyrene solutions in methylcyclohexane. Journal of Supercritical Fluids, 1999, 15, 261-272. | 3.2 | 19 |
| 51 | Volumetric Properties of Propane, n-Octane, and Their Binary Mixtures at High Pressures. Industrial & Engineering Chemistry Research, 2013, 52, 6592-6609. | 3.7 | 19 |
| 52 | Foaming of poly(ethylene vinyl acetate) and poly(ethylene vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 T Science, 2018, 135, 45841. | 2.6 | 19 |
| 53 | Polymerization of styrene in supercritical n-butane. Journal of Supercritical Fluids, 1990, 3, 198-204. | 3.2 | 18 |
| 54 | Alternative solvents for cellulose derivatives:. Journal of Supercritical Fluids, 1998, 13, 135-141. | 3.2 | 18 |

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|----|--|-----|-----------|
| 55 | Viscosity Reduction of Polystyrene Solutions in Toluene with Supercritical Carbon Dioxide. <i>Macromolecules</i> , 1999, 32, 7325-7328. | 4.8 | 18 |
| 56 | Phase behavior, density, and crystallization of polyethylene inn-pentane and inn-pentane/CO ₂ at high pressures. <i>Journal of Applied Polymer Science</i> , 2003, 89, 2201-2209. | 2.6 | 18 |
| 57 | Crystallization and gelation of isotactic poly(4-methyl-1-pentene) in n-pentane and in n-pentane+CO ₂ at high pressures. <i>Journal of Supercritical Fluids</i> , 2006, 38, 132-145. | 3.2 | 18 |
| 58 | The miscibility and phase behavior of polyethylene with poly(dimethylsiloxane) in near-critical pentane. <i>Korean Journal of Chemical Engineering</i> , 2002, 19, 153-158. | 2.7 | 17 |
| 59 | Gradient blending of poly(dimethylsiloxane) with polystyrene and polyethylene in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2008, 44, 48-61. | 3.2 | 17 |
| 60 | Melting point depression of Piroxicam in carbon dioxide + co-solvent mixtures and inclusion complex formation with β -cyclodextrin. <i>Journal of Supercritical Fluids</i> , 2012, 71, 19-25. | 3.2 | 17 |
| 61 | High-pressure viscosity of polystyrene solutions in toluene + carbon dioxide binary mixtures. <i>Journal of Applied Polymer Science</i> , 2000, 75, 306-315. | 2.6 | 16 |
| 62 | Modeling of the volumetric properties and estimation of the solubility parameters of ionic liquid+ethanol mixtures with the Sanchezâ€“Lacombe and Simhaâ€“Somcynsky equations of state: [EMIM]Ac+ethanol and [EMIM]Cl+ethanol mixtures. <i>Journal of Supercritical Fluids</i> , 2015, 98, 86-101. | 3.2 | 16 |
| 63 | Volumetric Properties of Sulfur Hexafluoride + Pentane and Sulfur Hexafluoride + Toluene at High Pressures. <i>Journal of Chemical & Engineering Data</i> , 1997, 42, 389-394. | 1.9 | 15 |
| 64 | Miscibility of isotactic polypropylene in n-pentane and n-pentane + carbon dioxide mixtures at high pressures. <i>Journal of Supercritical Fluids</i> , 1998, 11, 173-177. | 3.2 | 15 |
| 65 | Volumetric Properties and Internal Pressure of Poly(α -olefin) Base Oils. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 17725-17734. | 3.7 | 15 |
| 66 | A tunable mixture solvent for poly(ϵ -caprolactone): Acetone+CO ₂ . <i>Polymer</i> , 2007, 48, 5612-5625. | 3.8 | 13 |
| 67 | High-Pressure Torsional Braid Analysis (HP-TBA): A new technique for assessment of thermal transitions and changes in moduli of polymers exposed to supercritical or compressed fluids. <i>Journal of Supercritical Fluids</i> , 2019, 143, 223-231. | 3.2 | 13 |
| 68 | (p,V,T) Behaviour and miscibility of (polysulfone+THF+carbon dioxide) at high pressures. <i>Journal of Chemical Thermodynamics</i> , 2003, 35, 605-624. | 2.0 | 12 |
| 69 | High pressure density, miscibility and compressibility of poly(lactide-co-glycolide) solutions in acetone and acetone+CO ₂ binary fluid mixtures. <i>Journal of Supercritical Fluids</i> , 2013, 75, 159-171. | 3.2 | 12 |
| 70 | An automated high pressure PVT apparatus for continuous recording of density and isothermal compressibility of fluids. <i>Review of Scientific Instruments</i> , 1996, 67, 244-250. | 1.3 | 11 |
| 71 | Phase Boundaries and Crystallization of Polyethylene inn-Pentane andn-Pentane + Carbon Dioxide Fluid Mixtures. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 1478-1492. | 3.7 | 11 |
| 72 | Cure behavior of paperâ€“phenolic composite systems: Kinetic modeling. <i>Journal of Applied Polymer Science</i> , 1994, 51, 353-364. | 2.6 | 10 |

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|----|---|-----|-----------|
| 73 | Critical Polymer Concentrations of Polyethylene Solutions in Pentane. Journal of Chemical & Engineering Data, 2002, 47, 571-574. | 1.9 | 10 |
| 74 | Kinetics of pressure-induced phase separation in polystyrene+acetone solutions at high pressures. Polymer, 2006, 47, 7943-7952. | 3.8 | 10 |
| 75 | High-pressure crystallization and melting of polyethylene in n-pentane. Journal of Supercritical Fluids, 2006, 38, 406-419. | 3.2 | 9 |
| 76 | Modification of biomedical polymers in dense fluids. Miscibility and foaming of poly(p-dioxanone) in carbon dioxide+acetone fluid mixtures. Journal of Supercritical Fluids, 2012, 66, 372-379. | 3.2 | 9 |
| 77 | Linking thermophysical and rheological properties to the selection of CO2 foaming conditions of rubbery elastomers using the relative rigidity reduction path. Journal of Supercritical Fluids, 2020, 166, 105015. | 3.2 | 9 |
| 78 | Kinetic Model for Supercritical Delignification of Wood. ACS Symposium Series, 1989, , 317-331. | 0.5 | 8 |
| 79 | Viscosity of Polymer Solutions in Near-Critical and Supercritical Fluids. ACS Symposium Series, 1992, , 104-120. | 0.5 | 8 |
| 80 | Reliable method for determination of the velocity of a sinker in a high-pressure falling body type viscometer. Review of Scientific Instruments, 2002, 73, 3664-3670. | 1.3 | 8 |
| 81 | Miscibility, Phase Separation, and Phase Settlement Dynamics in Solutions of Ethylene-Propylene-Diene Monomer Elastomer in Propane + n-Octane Binary Fluid Mixtures at High Pressures. Industrial & Engineering Chemistry Research, 2013, 52, 1806-1818. | 3.7 | 7 |
| 82 | High Pressure Volumetric Properties and Viscosity of Base Oils Used in Automotive Lubricants and Their Modeling. Industrial & Engineering Chemistry Research, 2018, 57, 17266-17275. | 3.7 | 7 |
| 83 | Supercritical Fluid Processing in the Pulp and Paper and the Forest Products Industries. ACS Symposium Series, 1995, , 380-401. | 0.5 | 6 |
| 84 | Volumetric Properties and Solubility Parameters of Cyclohexane + CO ₂ Mixtures at High Pressures and Their Modeling with the Sanchez-Lacombe Equation of State. Industrial & Engineering Chemistry Research, 2017, 56, 8748-8766. | 3.7 | 6 |
| 85 | Dynamics of Pressure-Induced Phase Separation in Polymer Solutions. The Dependence of the Demixing Pressures on the Rate of Pressure Quench in Solutions of Poly(dimethylsiloxane) in Supercritical Carbon Dioxide. Industrial & Engineering Chemistry Research, 1999, 38, 4486-4490. | 3.7 | 5 |
| 86 | Development of ring-banded spherulitic morphologies and formation of radially oriented nano-pores in poly(3-hydroxybutyrate-co-3-hydroxyvalerate) during crystallization in CO ₂ . Journal of Supercritical Fluids, 2015, 96, 359-368. | 3.2 | 5 |
| 87 | High-Pressure Density, Viscosity, and Modeling of Mixtures of a Poly(1-olefin) Base Oil Lubricant with Polymeric Additives. Industrial & Engineering Chemistry Research, 2020, 59, 7926-7942. | 3.7 | 5 |
| 88 | Current State of Supercritical Fluid Science and Technology. ACS Symposium Series, 1992, , 1-8. | 0.5 | 4 |
| 89 | Density and Viscosity as Real-Time Probes for Progress of High-Pressure Polymerizations: Polymerization of Methyl Methacrylate in Acetone. Industrial & Engineering Chemistry Research, 2008, 47, 5039-5047. | 3.7 | 4 |
| 90 | Phase behavior and density of polysulfone in binary fluid mixtures of tetrahydrofuran and carbon dioxide under high pressure: Miscibility windows. Journal of Applied Polymer Science, 2002, 86, 2357-2362. | 2.6 | 3 |

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| 91 | Gelation, crystallization and morphological transformations of syndiotactic polystyrene in acetophenone and acetophenone + carbon dioxide mixtures at high pressures. Journal of Supercritical Fluids, 2009, 49, 93-102. | 3.2 | 3 |
| 92 | Confined batch foaming of semi-crystalline rubbery elastomers with carbon dioxide using a mold. Journal of Applied Polymer Science, 2021, 138, 50698. | 2.6 | 3 |
| 93 | Miscibility, phase separation and volumetric properties in solutions of poly(ϵ -caprolactone) in acetone+CO ₂ binary fluid mixtures at high pressures. Journal of Supercritical Fluids, 2013, 84, 43-60. | 3.2 | 2 |
| 94 | Light scattering behavior and the kinetics of pressure-induced phase separation in solutions of poly(μ -caprolactone) in acetone+CO ₂ binary fluid mixtures. Polymer, 2013, 54, 5719-5732. | 3.8 | 2 |
| 95 | Effect of Alkyl Chain Length on Derived Thermodynamic Properties of 1-Alkyl-3-methylimidazolium Chloride Ionic Liquids and Their Mixtures with Ethanol. Industrial & Engineering Chemistry Research, 2019, 58, 15649-15665. | 3.7 | 2 |
| 96 | Physical Foaming of an Ethylene/Acrylic Acid/ <i>n</i> -Butyl Acrylate Ionomer with Carbon Dioxide. Industrial & Engineering Chemistry Research, 2021, 60, 14213-14224. | 3.7 | 1 |
| 97 | Miscibility, phase separation, and volumetric properties in solutions of poly(dimethylsiloxane) in supercritical carbon dioxide. Journal of Applied Polymer Science, 2000, 75, 1397. | 2.6 | 1 |
| 98 | Supercritical Fluid Extraction of Lignin from Wood. ACS Symposium Series, 1989, , 42-57. | 0.5 | 0 |
| 99 | Cover Image, Volume 138, Issue 26. Journal of Applied Polymer Science, 2021, 138, 50775. | 2.6 | 0 |
| 100 | Glass transition behavior of poly(methyl methacrylate) in compressed carbon dioxide revisited – New perspectives. Thermochimica Acta, 2022, , 179250. | 2.7 | 0 |