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所有發表期刊論文

1. T.C. Huang and R.S. Juang, A study on mass transfer rate of glucose-sulfuric acid solutions in electro dialysis, *Journal of Chinese Institute of Chemical Engineers*, 15(3), 243-250 (1984).
2. T.C. Huang, R.S. Juang and T.H. Huang, Effect of brine depth on the loss of salt bed in a crystallizing pond, *Journal of the Chinese Institute of Chemical Engineers*, 16(4), 373-378 (1985).
3. T.C. Huang and R.S. Juang, Recovery of sulfuric acid with multi-compartment electro dialysis, *Industrial and Engineering Chemistry Process Design and Development*, 25(2), 537-542 (1986).
4. T.C. Huang and R.S. Juang, Extraction equilibrium of Zn(II) from sulfate solutions with bis(2-ethylhexyl) phosphoric acid, *Industrial and Engineering Chemistry Fundamentals*, 25(4), 752-757 (1986).
5. T.C. Huang and R.S. Juang, Kinetics and mechanism of zinc(II) extraction from sulfate solutions with di(2-ethylhexyl) phosphoric acid, *Journal of Chemical Engineering of Japan*, 19(5), 379-386 (1986).
6. T.C. Huang, R.S. Juang and T.H. Huang, Mass transfer of sodium chloride in simulated crystallizing ponds during the rainfall period, *Journal of Chemical Technology and Biotechnology*, 39(2), 93-106 (1987).
7. T.C. Huang and R.S. Juang, Transport of zinc(II) through supported liquid membranes using di(2-ethylhexyl) phosphoric acid as a mobile carrier, *Journal of Membrane Science*, 39(2-3), 209-226 (1987).
8. T.C. Huang and R.S. Juang, Rates and mechanism of divalent metals transport through supported liquid membranes containing di(2-ethylhexyl) phosphoric acid as a mobile carrier, *Journal of Chemical Technology and Biotechnology*, 42, 3-17 (1988).
9. S.C. Yang, R.S. Juang, W.C. Chang and J.S. Chen, Velocity measurements and energy distribution on isothermal sudden expanding swirling flow in an industrial burner with a bluff body, *Energy*, 15(11), 1015-1021 (1990).
10. R.S. Juang, S.C. Yang, W.C. Chang and J.S. Chen, Flow characteristics on isothermal sudden expanding swirling flow in an industrial burner with a bluff body, *Journal of Chemical Engineering of Japan*, 23(6), 722-727 (1990).
11. R.S. Juang and Y.T. Chang, Extraction of zinc(II) from sulfate solutions with bis(2-ethylhexyl) phosphoric acid in the presence of tri-*n*-octylphosphine oxide, *Industrial and Engineering Chemistry Research*, 30(11), 2444-2449 (1991).
12. R.S. Juang and J.Y. Su, Thermodynamic studies of weak aqueous metal sulfate solutions in solvent extraction systems, *Journal of Chemical Technology and Biotechnology*, 53(3), 237-242 (1992).
13. R.S. Juang and J.D. Jiang, Calculation of thermodynamic data for zinc(II) extraction from chloride solutions with di-*n*-pentyl pentanephosphonate, *Industrial and Engineering Chemistry Research*, 31(4), 1222-1227 (1992).

14. R.S. Juang, Modeling of extraction equilibrium of zinc(II) from chloride solutions with tri-*n*-octylphosphine oxide, *Journal of Chemical Technology and Biotechnology*, 54(1), 75-80 (1992).
15. R.S. Juang and Y.T. Chang, Effect of tri-*n*-butylphosphate and 2-ethyl-1-hexanol on the extraction of Zn(II) with di(2-ethylhexyl) phosphoric acid, *Journal of Chemical Engineering of Japan*, 25(3), 339-342 (1992).
16. R.S. Juang and J.Y. Su, Thermodynamic equilibrium of the extraction of cobalt(II) from sulfate solutions with bis(2-ethylhexyl) phosphoric acid, *Industrial and Engineering Chemistry Research*, 31(10), 2395-2400 (1992).
17. R.S. Juang and J.F. Liang, Thermal decomposition of azobisisobutyronitrile dissolved in xylene in the presence of tin(IV) chloride, *Journal of Chemical Technology and Biotechnology*, 55(4), 379-383 (1992).
18. R.S. Juang and J.Y. Su, Sorption of copper(II) and zinc(II) from aqueous sulfate solutions with bis(2-ethylhexyl) phosphoric acid-impregnated macroporous resins, *Industrial and Engineering Chemistry Research*, 31(12), 2774-2779 (1992).
19. R.S. Juang and J.Y. Su, Separation of zinc(II) and copper(II) from aqueous sulfate solutions with bis(2-ethylhexyl) phosphoric acid-impregnated macroporous resins, *Industrial and Engineering Chemistry Research*, 31(12), 2779-2783 (1992).
20. R.S. Juang and Y.T. Chang, Kinetics and mechanism for copper(II) extraction from sulfate solutions with bis(2-ethylhexyl) phosphoric acid, *Industrial and Engineering Chemistry Research*, 32(1), 207-213 (1993).
21. R.S. Juang and R.H. Lo, Stoichiometry of vanadium(IV) extraction from sulfate solutions with di(2-ethylhexyl) phosphoric acid dissolved in kerosene, *Journal of Chemical Engineering of Japan*, 26(2), 219-222 (1993).
22. R.S. Juang, Permeation and separation of zinc(II) and copper(II) with supported liquid membranes containing bis(2-ethylhexyl) phosphoric acid as a mobile carrier, *Industrial and Engineering Chemistry Research*, 32(5), 911-916 (1993).
23. R.S. Juang and J.F. Liang, Equilibrium studies for the interaction of aqueous metals and polyacrylic acid using a batch ultrafiltration method, *Journal of Membrane Science*, 82(1-2), 163-174 (1993).
24. R.S. Juang and J.F. Liang, Removal of copper(II) and zinc(II) from aqueous sulfate solutions with polyacrylic acid by a batch complexation-ultrafiltration process, *Journal of Membrane Science*, 82(1-2), 175-183 (1993).
25. R.S. Juang and R.H. Lo, Effect of acetate medium on the extraction of cobalt(II) with di(2-ethylhexyl) phosphoric acid dissolved in kerosene, *Journal of Chemical Technology and Biotechnology*, 57(3), 265-271 (1993).
26. R.S. Juang, J.F. Liang and J.D. Jiang, Removal of dyes from aqueous solutions using a low-pressure batch ultrafiltration, *Separation Science and Technology*, 28(11-12), 2049-2059 (1993).
27. R.S. Juang and J.F. Liang, Competitive permeation of cobalt(II) and nickel(II) with supported liquid membranes, *Chemical Engineering Communications*, 126, 13-25 (1993).
28. R.S. Juang and R.H. Lo, Equilibrium studies of the extraction of zirconium(IV) from sulfuric acid solutions with di(2-ethylhexyl) phosphoric acid, *Journal of Chemical Technology and Biotechnology*, 58(3), 261-269 (1993).

29. R.S. Juang, Modeling of competitive permeation of cobalt(II) and nickel(II) in a di(2-ethylhexyl) phosphoric acid supported liquid membrane process, *Journal of Membrane Science*, 85(2), 157-166 (1993).
30. R.S. Juang and J.D. Jiang, Rate-controlling mechanism of cobalt(II) transport across a supported liquid membrane containing di(2-ethylhexyl) phosphoric acid, *Separation Science and Technology*, 29(2), 223-237 (1994).
31. R.S. Juang and H.L. Chang, Salting-out effect in the extraction of cobalt(II) from chloride solutions with tri-*n*-butylphosphate and tri-*n*-octylphosphine oxide, *Journal of Chemical Engineering of Japan*, 27(2), 238-241 (1994).
32. R.S. Juang and R.H. Lo, Mass-transfer characteristics of a membrane-based permeation cell and its applications to the kinetic studies of solvent extraction, *Industrial and Engineering Chemistry Research*, 33(4), 1001-1010 (1994).
33. R.S. Juang and R.H. Lo, Kinetics of coupled transport of vanadium(IV) from sulfate solutions through supported liquid membranes, *Industrial and Engineering Chemistry Research*, 33(4), 1011-1016 (1994).
34. R.S. Juang and S.H. Lee, Extraction equilibria of lead(II) from nitrate solutions with acidic organophosphorus compounds, *Journal of Chemical Technology and Biotechnology*, 60(1), 61-66 (1994).
35. R.S. Juang and W.T. Huang, Equilibrium studies on the extraction of citric acid from aqueous solutions with tri-*n*-octylamine, *Journal of Chemical Engineering of Japan*, 27(4), 498-504 (1994).
36. R.S. Juang and H.L. Chang, Analysis of distribution data for zinc(II) extraction from concentrated chloride solutions by di-*n*-butyl butylphosphonate, *Journal of the Chinese Institute of Chemical Engineers*, 25(5), 308-313 (1994).
37. R.S. Juang and J.D. Jiang, Application of batch ultrafiltration to the separation of W/O emulsions in liquid surfactant membrane processes, *Journal of Membrane Science*, 96(3), 193-203 (1994).
38. R.S. Juang and H.C. Lin, Metal sorption with extractant-impregnated macroporous resins 1. Particle diffusion kinetics, *Journal of Chemical Technology and Biotechnology*, 62(2), 132-140 (1995).
39. R.S. Juang and H.C. Lin, Metal sorption with extractant-impregnated macroporous resins 2. Chemical reaction and particle diffusion kinetics, *Journal of Chemical Technology and Biotechnology*, 62(2), 141-147 (1995).
40. R.S. Juang and J.D. Jiang, Lead(II) extraction from nitrate solutions with di(2-ethylhexyl) phosphoric acid, *Solvent Extraction and Ion Exchange*, 13(2), 229-242 (1995).
41. R.S. Juang and J.D. Jiang, Recovery of nickel(II) from a simulated electroplating rinse solution by solvent extraction and liquid surfactant membrane, *Journal of Membrane Science*, 100(2), 163-170 (1995).
42. R.S. Juang and H.L. Chang, Column sorption of citric acid from aqueous solutions with tri-*n*-octylamine -impregnated macroporous resins, *Separation Science and Technology*, 30(6), 917-931 (1995).
43. R.S. Juang and H.L. Chang, Distribution equilibrium of citric acid between an aqueous solution and tri-*n*-octylamine-impregnated macroporous resin, *Industrial and Engineering Chemistry Research*, 34(4), 1294-1301 (1995).

44. R.S. Juang and T.C. Chou, Kinetics of thermal decomposition of azobisisobutyronitrile in heterogeneous media, *Journal of the Chinese Institute of Chemical Engineers*, 26(2), 89-94 (1995).
45. R.S. Juang and W.T. Huang, Kinetic studies on the extraction of citric acid from aqueous solutions with tri-*n*-octylamine, *Journal of Chemical Engineering of Japan*, 28(3), 274-281 (1995).
46. R.S. Juang and S.H. Lee, Analysis of transport rates of europium(III) across an organophosphinic acid supported liquid membrane, *Journal of Membrane Science*, 110(1), 13-23 (1996).
47. R.S. Juang and H.L. Chang, A mechanistic study of uphill transport of metal ions through counter-transport supported liquid membranes, *Separation Science and Technology*, 31(3), 365-379 (1996).
48. R.S. Juang and W.T. Huang, Catalytic role of a water-immiscible organic acid on amine extraction of citric acid from aqueous solutions, *Industrial and Engineering Chemistry Research*, 35(2), 546-552 (1996).
49. R.S. Juang, R.L. Tseng, F.C. Wu and S.J. Lin, Use of chitin and chitosan in lobster shell wastes for color removal from aqueous solutions, *Journal of Environmental Science and Health*, A31(2), 325-338 (1996).
50. R.S. Juang and T.C. Chou, Sorption kinetics of citric acid from aqueous solutions with macroporous resins containing a tertiary amine, *Journal of Chemical Engineering of Japan*, 29(1), 146-151 (1996).
51. R.S. Juang and L.J. Chen, Analysis of transport rates of citric acid through a supported liquid membrane containing tri-*n*-octylamine, *Industrial and Engineering Chemistry Research*, 35(5), 1673-1679 (1996).
52. R.S. Juang, F.C. Wu and R.L. Tseng, Adsorption isotherms of phenolic compounds from aqueous solutions on activated carbon fibers, *Journal of Chemical and Engineering Data*, 41(3), 487-492 (1996).
53. R.S. Juang and S.H. Lee, Column sorption of divalent metal ions from sulfate solutions with extractant-impregnated macroporous resins, *Journal of Chemical Technology and Biotechnology*, 66(2), 153-159 (1996).
54. R.S. Juang and R.T. Wu, Effect of a water-insoluble organic acid on amine extraction of acetic acid from aqueous solutions. Equilibrium studies, *Journal of Chemical Technology and Biotechnology*, 66(2), 160-168 (1996).
55. R.S. Juang and S.H. Lee, Column separation of divalent metals from sulfate solutions with impregnated resins containing di(2-ethylhexyl) phosphoric acid, *Reactive and Functional Polymers*, 29(3), 175-183 (1996).
56. R.S. Juang and M.N. Chen, Measurement of binding constants of poly(ethylenimine) with metal ions and metal chelates in aqueous media by ultrafiltration, *Industrial and Engineering Chemistry Research*, 35(6), 1935-1943 (1996).
57. R.S. Juang and R.H. Huang, Comparison of extraction equilibria of succinic and tartaric acids from aqueous solutions with tri-*n*-octylamine, *Industrial and Engineering Chemistry Research*, 35(6), 1944-1950 (1996).
58. R.S. Juang and T.C. Chou, Sorption of citric acid from aqueous solutions with macroporous resins containing a tertiary amine. Equilibrium, *Separation Science and Technology*, 31(10), 1409-1425 (1996).

59. R.S. Juang and Y.S. Lin, Distribution equilibrium of penicillin G between water and an organic solution of Amberlite LA-2, *Chemical Engineering Journal*, 62(3), 231-236 (1996).
60. R.S. Juang, R.L. Tseng, F.C. Wu and S.H. Lee, Liquid-phase adsorption of phenol and its derivatives onto activated carbon fibers, *Separation Science and Technology*, 31(14), 1915-1931 (1996).
61. R.S. Juang and S.L. Swei, Effect of dye nature on its adsorption from aqueous solutions using activated carbons, *Separation Science and Technology*, 31(15), 2143-2158 (1996).
62. R.S. Juang and M.N. Chen, Retention of copper(II)-EDTA chelates from dilute aqueous solutions using a polyelectrolyte-enhanced ultrafiltration process, *Journal of Membrane Science*, 119(1), 25-37 (1996).
63. R.S. Juang and R.H. Huang, Equilibrium studies on reactive extraction of lactic acid with an amine extractant, *Chemical Engineering Journal*, 65(1), 47-53 (1997).
64. R.S. Juang and M.N. Chen, Removal of Cu(II) chelates of EDTA and NTA from aqueous solutions by membrane filtration, *Industrial and Engineering Chemistry Research*, 36(1), 179-186 (1997).
65. R.S. Juang and L.J. Chen, Transport of citric acid through supported liquid membranes containing various salts of a tertiary amine, *Journal of Membrane Science*, 123(1), 81-87 (1997).
66. R.S. Juang and M.L. Chen, Comparative equilibrium studies on the sorption of metal ions with macroporous resins containing a liquid ion-exchanger, *Separation Science and Technology*, 32(5), 1017-1035 (1997).
67. R.S. Juang and M.L. Chen, Application of the Elovich equation to the kinetics of metal sorption with solvent impregnated resins, *Industrial and Engineering Chemistry Research*, 36(3), 813-820 (1997).
68. R.S. Juang and R.H. Huang, Kinetic studies on lactic acid extraction with amine using a microporous membrane-based stirred cell, *Journal of Membrane Science*, 129(2), 185-196 (1997).
69. R.S. Juang, F.C. Wu and R.L. Tseng, Ability of activated clay for the adsorption of dyes from aqueous solutions, *Environmental Technology*, 18(5), 525-531 (1997).
70. R.S. Juang and M.L. Chen, Competitive sorption of metal ions from binary sulfate solutions with solvent impregnated resins, *Reactive and Functional Polymers*, 34(1), 93-102 (1997).
71. R.S. Juang, R.H. Huang and R.T. Wu, Separation of citric and lactic acids in aqueous solutions by solvent extraction and liquid membrane processes, *Journal of Membrane Science*, 136(1-2), 89-99 (1997).
72. R.S. Juang, R.L. Tseng, F.C. Wu and S.H. Lee, Adsorption behavior of reactive dyes from aqueous streams onto chitosan, *Journal of Chemical Technology and Biotechnology*, 70(4), 391-399 (1997).
73. R.S. Juang and S.C. Liu, Interfacial properties on synthesis of an ether-ester compound by liquid-liquid phase-transfer catalysis, *Industrial and Engineering Chemistry Research*, 36(12), 5296-5301 (1997).
74. R.S. Juang and C.Y. Ju, Equilibrium sorption of copper(II)-ethylenediaminetetraacetic acid chelates onto cross-linked, polyaminated chitosan beads, *Industrial and Engineering Chemistry Research*, 36(12), 5403-5409 (1997).

75. R.S. Juang, S.H. Lee and R.C. Shiau, Mass transfer modeling of the permeation of lactic acid in an amine- mediated supported liquid membrane, *Journal of Membrane Science*, 137(1-2), 231-239 (1997).
76. R.S. Juang and Y.S. Lin, Investigation on interfacial reaction kinetics of penicillin G and Amberlite LA-2 from membrane flux measurements, *Journal of Membrane Science*, 141(1), 19-30 (1998).
77. R.S. Juang and L.D. Shiau, Ion exchange equilibria of metal chelates of ethylenediaminetetraacetic acid with Amberlite IRA-68, *Industrial and Engineering Chemistry Research*, 37(2), 555-560 (1998).
78. R.S. Juang, S.H. Lee and R.C. Shiau, Carrier-facilitated liquid membrane extraction of penicillin G from aqueous streams, *Journal of Membrane Science*, 146(1), 95-104 (1998).
79. R.S. Juang and C.Y. Ju, Kinetics of the sorption of Cu(II)-ethylenediaminetetraacetic acid chelated anions onto cross-linked, polyaminated chitosan beads, *Industrial and Engineering Chemistry Research*, 37(8), 3463-3469 (1998).
80. R.S. Juang and S.C. Liu, Reaction rates and surface activities in a liquid-liquid phase-transfer catalyzed reaction, *Journal of the Chinese Institute of Chemical Engineers*, 29(5), 381-386 (1998).
81. R.S. Juang, S.H. Lee and R.H. Huang, Modeling amine-facilitated liquid membrane transport of binary organic acids, *Separation Science and Technology*, 33(15), 2379-2395 (1998).
82. R.S. Juang and S.C. Liu, Kinetic studies on the esterification of a substituted phenylacetic acid by phase-transfer catalysis, *Industrial and Engineering Chemistry Research*, 37(12), 4625-4630 (1998).
83. F.C. Wu, R.L. Tseng and R.S. Juang, Role of pH in metal adsorption from aqueous solutions containing chelating agents onto chitosan, *Industrial and Engineering Chemistry Research*, 38(1), 270-275 (1999).
84. R.S. Juang and H.C. Huang, Non-dispersive extraction separation of metal ions using hydrophilic microporous and cation exchange membranes, *Journal of Membrane Science*, 156(2), 179-186 (1999).
85. R.S. Juang, F.C. Wu and R.L. Tseng, Adsorption removal of Cu(II) using chitosan from a simulated rinse solution containing chelating agents, *Water Research*, 33(10), 2403-2409 (1999).
86. R.S. Juang, Preparation, properties, and sorption behavior of impregnated resins containing acidic organophosphorus extractants (Invited Review), *Proceedings of the National Science Council. Part A: Physical Science and Engineering*, 23(3), 353-364 (1999).
87. R.S. Juang, J.Y. Shiau and H.J. Shao, Effect of temperature on equilibrium adsorption of phenols onto nonionic polymeric resins, *Separation Science and Technology*, 34(9), 1819-1831 (1999).
88. R.L. Tseng, F.C. Wu and R.S. Juang, Effect of complexing agents on liquid-phase adsorption and desorption of copper(II) using chitosan, *Journal of Chemical Technology and Biotechnology*, 74(6), 533-538 (1999).
89. R.S. Juang, S.W. Wang and L.C. Lin, Simultaneous recovery of EDTA and lead(II) from their chelated solutions using a cation exchange membrane, *Journal of Membrane Science*, 160(2), 225-233 (1999).

90. R.S. Juang and I.P. Huang, Extraction of copper(II)-NTA chelated anions from aqueous solutions with Aliquat 336, *Separation Science and Technology*, 34(12), 2407-2420 (1999).
91. F.C. Wu, R.L. Tseng and R.S. Juang, Preparation of activated carbons from bamboo and their adsorption abilities for dyes and phenol, *Journal of Environmental Science and Health*, A34(9), 1753-1775 (1999).
92. R.L. Tseng, F.C. Wu and R.S. Juang, Pore structure and metal adsorption ability of chitosans prepared from fishery wastes, *Journal of Environmental Science and Health*, A34(9), 1815-1828 (1999).
93. F.C. Wu, R.L. Tseng and R.S. Juang, Pore structure and adsorption performance of activated carbons prepared from plum kernels, *Journal of Hazardous Materials*, 69(3), 287-302 (1999).
94. R.S. Juang, Y.J. Chen and I.P. Huang, Amine-based extraction recovery of copper(II) from aqueous solutions in the presence of EDTA. Equilibrium studies, *Separation Science and Technology*, 34(15), 3099-3112 (1999).
95. R.S. Juang and R.T. Wu, Extraction of acetate from simulated waste solutions in chloromycetin production, *Separation and Purification Technology*, 17(3), 225-233 (1999).
96. R.S. Juang and J.Y. Shiau, Adsorption isotherms of phenols from water onto macroreticular resins, *Journal of Hazardous Materials*, 70(3), 171-183 (1999).
97. R.S. Juang and R.T. Wu, Rates of acetate extraction from simulated waste streams in chloromycetin production, *Journal of Chemical Technology and Biotechnology*, 74(12), 1165-1170 (1999).
98. R.S. Juang and L.C. Lin, Treatment of the complexed copper(II) solutions with electrochemical membrane processes, *Water Research*, 34(1), 43-50 (2000).
99. R.S. Juang and J.D. Chen, Mass transfer modeling of citric and lactic acids in a microporous membrane extractor, *Journal of Membrane Science*, 164(1-2), 67-77 (2000).
100. R.S. Juang, J.D. Chen and H.C. Huang, Dispersion-free membrane extraction: Case studies of metal ion and organic acid extraction, *Journal of Membrane Science*, 165(1), 59-73 (2000).
101. R.S. Juang and R.C. Shiau, Metal removal from aqueous solutions using chitosan-enhanced membrane filtration, *Journal of Membrane Science*, 165(2), 159-167 (2000).
102. F.C. Wu, R.L. Tseng and R.S. Juang, Comparative adsorption of metals and dyes onto flake- and bead-types of chitosans prepared from fishery wastes, *Journal of Hazardous Materials*, 73(1), 63-75 (2000).
103. R.S. Juang and I.P. Huang, Kinetic studies of copper(II) extraction from EDTA-bearing solutions with Aliquat 336 using a membrane cell, *Separation Science and Technology*, 35(6), 869-881 (2000).
104. R.S. Juang and L.C. Lin, Efficiencies of electrolytic treatment of the complexed metal solutions in a stirred cell having a membrane separator, *Journal of Membrane Science*, 171(1), 19-29 (2000).
105. R.S. Juang and L.C. Lin, Rates of metal electrodeposition from aqueous solutions in the presence of chelating agent, *Separation Science and Technology*, 35(7), 1087-1098 (2000).

106. R.S. Juang and I.P. Huang, Hollow-fiber membrane extraction of copper(II) from aqueous ethylenediaminetetraacetic acid solutions with Aliquat 336, *Industrial and Engineering Chemistry Research*, 39(5), 1409-1415 (2000).
107. R.S. Juang and S.W. Wang, Electrolytic recovery of binary metals and EDTA from strong complexed solutions, *Water Research*, 34(12), 3179-3185 (2000).
108. R.S. Juang, F.C. Wu and R.L. Tseng, Mechanism of adsorption of dyes and phenols from water using the activated carbons prepared from plum kernels, *Journal of Colloid and Interface Science*, 227(2), 437-444 (2000).
109. R.S. Juang and I.P. Huang, Liquid-liquid extraction of copper(II)-EDTA chelated anions with microporous hollow fibers, *Journal of Chemical Technology and Biotechnology*, 75(7), 610-616 (2000).
110. R.S. Juang and C.H. Chiou, Ultrafiltration rejection of dissolved ions using various weakly basic water-soluble polymers, *Journal of Membrane Science*, 177(2), 207-214 (2000).
111. R.S. Juang and S.W. Wang, Metal recovery and EDTA recycling from simulated washing effluents of metal-contaminated soils, *Water Research*, 34(15), 3795-3803 (2000).
112. G. Annadurai, D.J. Lee and R.S. Juang, Box-Behnken studies on dye removal from water using chitosan and activated carbon adsorbents, *Journal of the Chinese Institute of Chemical Engineers*, 31(6), 609-615 (2000).
113. R.S. Juang and L.C. Lin, Electrochemical treatment of copper(II) from aqueous citrate solutions using a cation-selective membrane, *Separation and Purification Technology*, 22-23, 627-635 (2001).
114. F.C. Wu, R.L. Tseng and R.S. Juang, Kinetic modeling of liquid-phase adsorption of reactive dyes and metal ions onto chitosan, *Water Research*, 35(3), 613-618 (2001).
115. F.C. Wu, R.L. Tseng and R.S. Juang, Enhanced abilities of highly swollen chitosan beads for color removal and tyrosinase immobilization, *Journal of Hazardous Materials*, 81(1-2), 167-177 (2001).
116. R.S. Juang, R.L. Tseng and F.C. Wu, Role of microporosity of activated carbons on their adsorption abilities for phenols and dyes, *Adsorption*, 7(1), 65-72 (2001).
117. F.C. Wu, R.L. Tseng and R.S. Juang, Adsorption of dyes and phenols from water onto the activated carbons prepared from corncob wastes, *Environmental Technology*, 22(2), 205-213 (2001).
118. R.S. Juang and G.S. Yan, Enhanced flux and selectivity of metal ions through a dialysis membrane by the addition of complexing agents to the receiving phase, *Journal of Membrane Science*, 186(1), 53-61 (2001).
119. R.S. Juang and C.H. Chiou, Feasibility of the use of polymer-assisted membrane filtration for brackish water softening, *Journal of Membrane Science*, 187(1-2), 119-127 (2001).
120. F.C. Wu, R.L. Tseng and R.S. Juang, Kinetics of color removal by adsorption from water using activated clay, *Environmental Technology*, 22(6), 721-729 (2001).
121. S.H. Lin and R.S. Juang, Mass-transfer in hollow-fiber modules for the extraction and back-extraction of copper(II) with LIX64N carriers, *Journal of Membrane Science*, 188(2), 251-262 (2001).
122. G. Annadurai, R.S. Juang and D.J. Lee, Adsorption of rhodamine 6G from aqueous solutions onto activated carbon, *Journal of Environmental Science and Health*, A36(5), 715-725 (2001).

123. R.S. Juang and H.S. Ju, Effect of added complexing agents on the extraction of copper(II) from sulfate solutions with di(2-ethylhexyl) phosphoric acid, *Separation Science and Technology*, 36(11), 2499-2514 (2001).
124. R.S. Juang and W.L. Wu, A simple electrolyte for the determination of small cations in natural waters by capillary electrophoresis, *Journal of Environmental Science and Health*, A36(6), 935-946 (2001).
125. R.S. Juang, F.C. Wu and R.L. Tseng, Solute adsorption and enzyme immobilization onto the chitosan beads prepared from shrimp shell wastes, *Bioresource Technology*, 80(3), 187-193 (2001).
126. S.H. Lin and R.S. Juang, Determination of mass transfer resistances for the extraction and back-extraction of metal ions in two hollow fiber contactors, *Journal of the Chinese Institute of Chemical Engineers*, 32(5), 445-452 (2001).
127. S.H. Lin and R.S. Juang, Simultaneous extraction and stripping of EDTA-chelated metallic anions with Aliquat 336 in hollow fiber contactors, *Chemical Engineering Science*, 57(1), 143-152 (2002).
128. S.H. Lin, S.H. Huang and R.S. Juang, Non-ideality in two-phase systems of copper(II) extraction from sulfate solutions with LIX64N in kerosene, *Separation Science and Technology*, 37(1), 147-159 (2002).
129. R.S. Juang and H.J. Shao, Effect of pH on competitive adsorption of Cu(II), Ni(II), and Zn(II) from water onto chitosan beads, *Adsorption*, 8(1), 71-78 (2002).
130. S.H. Lin, H.C. Kao, S.H. Huang and R.S. Juang, Equilibrium and kinetic studies of the extraction of chelated copper(II) anions with Aliquat 336, *Journal of Chemical Technology and Biotechnology*, 77(2), 168-174 (2002).
131. R.S. Juang and J.Y. Shiau, Removal of acetone and methanol from gaseous streams in a hollow fiber absorber, *Separation Science and Technology*, 37(2), 261-277 (2002).
132. R.S. Juang, F.C. Wu and R.L. Tseng, Use of chemically modified chitosan beads for sorption and enzyme immobilization, *Advances in Environmental Research*, 6(2), 171-177 (2002).
133. G. Annadurai, R.S. Juang and D.J. Lee, Factorial design analysis for the adsorption of dye onto activated carbon beads incorporated with calcium alginate, *Advances in Environmental Research*, 6(2), 191-198 (2002).
134. S.H. Lin and R.S. Juang, Kinetic modeling of simultaneous recovery of metallic cations and anions with a mixture of extractants in hollow-fiber modules, *Industrial and Engineering Chemistry Research*, 41(4), 853-861 (2002).
135. G. Annadurai, R.S. Juang and D.J. Lee, Factor optimization of phenol removal using the activated carbons immobilized with *Pseudomonas putida*, *Journal of Environmental Science and Health*, A37(2), 149-161 (2002).
136. R.S. Juang, F.C. Wu and R.L. Tseng, Characterization and use of activated carbons prepared from bagasse for liquid-phase adsorption, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 201(1-3), 191-199 (2002).
137. R.S. Juang and W.L. Wu, Adsorption of sulfate and copper(II) on goethite in relation to the changes of zeta potentials, *Journal of Colloid and Interface Science*, 249(1), 22-29 (2002).
138. G. Annadurai, R.S. Juang and D.J. Lee, Biodegradation and adsorption of phenol using the activated carbons immobilized with *Pseudomonas putida*, *Journal of Environmental Science and Health*, A37(6), 1133-1146 (2002).

139. G. Annadurai, R.S. Juang and D.J. Lee, Use of cellulose-based wastes for adsorption of dyes from aqueous solutions, *Journal of Hazardous Materials*, 92(3), 263-274 (2002).
140. R.S. Juang and T.S. Lee, Oxidative pyrolysis of organic ion exchange resins in the presence of metal oxide catalysts, *Journal of Hazardous Materials*, 92(3), 301-314 (2002).
141. S.H. Lin and R.S. Juang, Heavy metal removal from water by sorption using surfactant-modified montmorillonite, *Journal of Hazardous Materials*, 92(3), 315-326 (2002).
142. R.S. Juang and H.J. Shao, A simplified equilibrium model for the sorption of heavy metals from aqueous solutions on chitosan, *Water Research*, 36(12), 2999-3008 (2002).
143. R.S. Juang and Y.Y. Wang, Amino acid separation with D2EHPA by solvent extraction and liquid surfactant membranes, *Journal of Membrane Science*, 207(2), 241-252 (2002).
144. S.H. Lin and R.S. Juang, Removal of free and chelated Cu(II) ions from water by a non-dispersive solvent extraction process, *Water Research*, 36(14), 3611-3619 (2002).
145. R.S. Juang, Y.C. Wang and H.C. Kao, Effect of water-soluble masking agents on ion exchange of heavy metals from sulfate solutions, *Journal of the Chinese Institute of Chemical Engineers*, 33(4), 333-340 (2002).
146. R.S. Juang and H.L. Huang, Modeling of non-dispersive extraction of binary Zn(II) and Cu(II) with D2EHPA in hollow fiber devices, *Journal of Membrane Science*, 208(1-2), 31-38 (2002).
147. G. Annadurai, R.S. Juang and D.J. Lee, Microbiological degradation of phenol using the mixed liquors of *Pseudomonas putida* and activated sludge, *Waste Management*, 22(7), 703-710 (2002).
148. R.S. Juang, S.H. Lin and K.H. Tsao, Mechanism of the sorption of phenols from aqueous solutions onto surfactant-modified montmorillonite, *Journal of Colloid and Interface Science*, 254(2), 234-241 (2002).
149. F.C. Wu, R.L. Tseng and R.S. Juang, Adsorption of dyes and humic acid from water using the chitosan- encapsulated activated carbons, *Journal of Chemical Technology and Biotechnology*, 77(11), 1269-1279 (2002).
150. R.S. Juang and Y.C. Wang, Effect of added complexing anions on cation exchange of Cu(II) and Zn(II) with a strong-acid resin, *Industrial and Engineering Chemistry Research*, 42(23), 5558-5564 (2002).
151. G. Annadurai, R.S. Juang and D.J. Lee, Adsorption of heavy metal ions from water using banana and orange peels, *Water Science and Technology*, 47(1), 185-190 (2003).
152. L.C. Chen, S.S. Sung, W.W. Lin, D.J. Lee, C.P. Huang, R.S. Juang and H.L. Chang, Observations of blanket characteristics in full-scale floc blanket clarifiers, *Water Science and Technology*, 47(1), 197-204 (2003).
153. R.S. Juang and Y.C. Wang, Use of complexing agents for effective ion-exchange separation of Co(II)/Ni(II) from aqueous solutions, *Water Research*, 37(4), 845-852 (2003).
154. R.L. Tseng, F.C. Wu and R.S. Juang, Liquid-phase adsorption of dyes and phenols using pinewood-based activated carbons, *Carbon*, 41(3), 487-495 (2003).

155. R.S. Juang and H.L. Huang, Mechanistic analysis of solvent extraction of heavy metals in membrane contactors, *Journal of Membrane Science*, 213(1-2), 125-135 (2003).
156. R.S. Juang and Y.C. Wang, Ligand-enhanced separation of divalent heavy metals from aqueous solutions using a strong-acid ion exchange resin, *Industrial and Engineering Chemistry Research*, 42(9), 1948-1954 (2003).
157. G. Annadurai, R.S. Juang, P.S. Yen and D.J. Lee, Use of thermally treated waste biological sludge as dye adsorbent, *Advances in Environmental Research*, 7(3), 739-744 (2003).
158. T.P. Chung, H.Y. Tseng and R.S. Juang, Mass transfer effect and intermediate detection for phenol degradation in immobilized *Pseudomonas putida* systems, *Process Biochemistry*, 38(10), 1497-1507 (2003).
159. R.S. Juang, Y.Y. Xu and C.L. Chen, Separation and removal of metal ions from dilute solutions using micellar-enhanced ultrafiltration, *Journal of Membrane Science*, 218(1-2), 257-267 (2003).
160. Y.H. Wang, S.H. Lin and R.S. Juang, Removal of heavy metals from aqueous solutions using various low-cost adsorbents, *Journal of Hazardous Materials*, 102(2-3), 291-302 (2003).
161. R.S. Juang, S.H. Lin and T.Y. Wang, Removal of metal ions from the complexed solutions in fixed bed using a strong-acid ion exchange resin, *Chemosphere*, 53(10), 1221-1228 (2003).
162. H.C. Kao and R.S. Juang, Hindered membrane diffusion in the non-dispersive stripping of Co(II) from organic amine solutions with hydrochloric acid, *Industrial and Engineering Chemistry Research*, 42(24), 6181-6187 (2003).
163. R.S. Juang, S.H. Lin and K.H. Tsao, Sorption of phenols from aqueous solutions in column systems using surfactant-modified montmorillonite, *Journal of Colloid and Interface Science*, 269(1), 46-52 (2004).
164. R.S. Juang, H.C. Kao and W.H. Wu, Analysis of liquid membrane extraction of binary Zn(II) and Cd(II) from chloride solutions with Aliquat 336 based on thermodynamic equilibrium models, *Journal of Membrane Science*, 228(2), 169-177 (2004).
165. S.H. Lin, T.Y. Wang and R.S. Juang, Metal rejection by nanofiltration from dilute solutions in the presence of complexing agents, *Separation Science and Technology*, 39(2), 363-376 (2004).
166. R.S. Juang, H.C. Kao and W.H. Wu, Liquid membrane transport and separation of Zn²⁺ and Cd²⁺ from sulfate media using organophosphorus acids as mobile carriers, *Journal of Chemical Technology and Biotechnology*, 79(2), 140-147 (2004).
167. S.H. Lin, H.C. Kao, C.H. Cheng and R.S. Juang, An EXAFS study of the structures of copper(II) and phosphate sorbed on goethite, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 234(1-3), 71-75 (2004).
168. R.S. Juang, W.C. Lee and C.L. Chen, Removal of sodium dodecyl benzene sulfonate and phenol from water by combined PAC adsorption and cross-flow microfiltration process, *Journal of Chemical Technology and Biotechnology*, 79(3), 240-246 (2004).
169. M.Y. Chang and R.S. Juang, Stability and catalytic kinetics of acid phosphatase immobilized on the composite beads of chitosan and activated clay, *Process Biochemistry*, 39(9), 1087-1091 (2004).
170. R.S. Juang, S.H. Lin, F.C. Huang and C.H. Cheng, Structural studies of Na-montmorillonite exchanged with Fe²⁺, Cr³⁺, and Ti⁴⁺ by N₂ adsorption and EXAFS, *Journal of Colloid and Interface Science*, 274(1), 337-340 (2004).

171. R.S. Juang and K.H. Lin, Ultrasound-assisted production of W/O emulsions in liquid surfactant membrane processes, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 238(1-3), 43-49 (2004).
172. R.S. Juang and J.Y. Chung, Equilibrium sorption of heavy metal ions and phosphate from single- and binary- sorbate solutions on goethite, *Journal of Colloid and Interface Science*, 275(1), 53-60 (2004).
173. T.P. Chung, P.C. Wu and R.S. Juang, Process development for degradation of phenol by *Pseudomonas putida* in hollow fiber membrane bioreactors, *Biotechnology and Bioengineering*, 87(2), 219-227 (2004).
174. T.P. Chung, W.T. Liu and R.S. Juang, Effects of substrate induction and added carbon source on phenol degradation by *Pseudomonas putida*, *Journal of the Chinese Institute of Chemical Engineers*, 35(4), 409-416 (2004).
175. M.Y. Chang and R.S. Juang, Adsorption of tannic acid, humic acid, and dyes from water using the composite of chitosan and activated clay, *Journal of Colloid and Interface Science*, 278(1), 18-25 (2004).
176. S.H. Lin, R.S. Juang and Y.H. Wang, Adsorption of acid dye from water on pristine and acid-activated clays in fixed beds, *Journal of Hazardous Materials*, 113(1-3), 195-200 (2004).
177. R.S. Juang and K.H. Lin, Flux recovery in the ultrafiltration of suspended solutions with ultrasound, *Journal of Membrane Science*, 243(1-2), 115-124 (2004).
178. W.W. Lin, S.S. Sung, L.C. Chen, H.Y. Chung, C.C. Wang, R.M. Wu, D.J. Lee, C.P. Huang, R.S. Juang, X.F. Peng and H.L. Chang, Treating high-turbidity water using full-scale floc blanket clarifiers, *Journal of Environmental Engineering, American Society of Civil Engineers*, 130(12), 1481-1487 (2004).
179. M.Y. Chang and R.S. Juang, Activities, stabilities, and reaction kinetics of three free and chitosan-clay composite immobilized enzymes, *Enzyme and Microbial Technology*, 36(1), 75-82 (2005).
180. F.C. Wu, R.L. Tseng and R.S. Juang, Comparisons of porous and adsorption properties of the carbons activated by steam and KOH, *Journal of Colloid and Interface Science*, 283(1), 49-56 (2005).
181. R.S. Juang and H.C. Kao, Extraction separation of Co(II) and Ni(II) from concentrated HCl solutions in rotating disc and hollow-fiber membrane contactors, *Separation and Purification Technology*, 42(1), 65-73 (2005).
182. S.H. Lin, H.C. Kao, H.N. Su and R.S. Juang, Effect of formaldehyde on Cu(II) removal from synthetic complexed solutions by solvent extraction, *Journal of Hazardous Materials*, 120(1-3), 1-7 (2005).
183. S.H. Lin, R.C. Hsiao, W.C. Lin and R.S. Juang, Salt removal from synthetic process solutions in liquid dye production by low-pressure nanofiltration, *Journal of the Chinese Institute of Chemical Engineers*, 36(2), 127-134 (2005).
184. R.S. Juang, S.H. Lin, H.C. Kao and M.H. Theng, Effect of formaldehyde on Cu(II) removal from synthetic complexed solutions by ion exchange, *Chemosphere*, 59(9), 1355-1360 (2005).
185. R.S. Juang, S.H. Lin and M.C. Yang, Mass transfer analysis on air stripping of VOCs from water in microporous hollow fibers, *Journal of Membrane Science*, 255(1-2), 79-87 (2005).

186. T.P. Chung, P.C. Wu and R.S. Juang, Use of microporous hollow fibers for improved biodegradation of high-strength phenol solutions, *Journal of Membrane Science*, 258(1-2), 55-63 (2005).
187. T.P. Chung, C.Y. Wu and R.S. Juang, Improved dynamic analysis on cell growth with substrate inhibition using two-phase models, *Biochemical Engineering Journal*, 25(3), 209-217 (2005).
188. D.S. Mathew and R.S. Juang, Improved back extraction of papain from AOT reverse micelles using alcohols and a counter-ionic surfactant, *Biochemical Engineering Journal*, 25(3), 219-225 (2005).
189. L.C. Lin and R.S. Juang, Ion-exchange equilibria of Cu(II) and Zn(II) from aqueous solutions with Chelex 100 and Amberlite IRC 748 resins, *Chemical Engineering Journal*, 112(1-3), 211-218 (2005).
190. H.C. Kao and R.S. Juang, Kinetic analysis of non-dispersive solvent extraction of concentrated Co(II) from chloride solutions with Aliquat 336: Significance of the knowledge of reaction equilibrium, *Journal of Membrane Science*, 264(1-2), 104-112 (2005).
191. M.Y. Chang and R.S. Juang, Equilibrium and kinetic studies on adsorption of surfactant, organic acids and dyes from water onto natural biopolymers, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 269(1-3), 35-46 (2005).
192. F.C. Wu, R.L. Tseng and R.S. Juang, Preparation of highly microporous carbons from fir wood by KOH activation for adsorption of dyes and phenols from water, *Separation and Purification Technology*, 47(1-2), 10-19 (2005).
193. R.S. Juang, H.C. Kao and F.Y. Liu, Ion exchange recovery of Ni(II) from simulated electroplating waste solutions containing anionic ligands, *Journal of Hazardous Materials*, 128(1), 53-59 (2006).
194. R.S. Juang, S.H. Lin and C.H. Cheng, Liquid-phase adsorption and desorption of phenol onto activated carbons with ultrasound, *Ultrasonics Sonochemistry*, 13(3), 251-260 (2006).
195. S.H. Lin, C.N. Chen and R.S. Juang, Extraction equilibria and separation of phenylalanine and aspartic acid from water with di(2-ethylhexyl)phosphoric acid, *Journal of Chemical Technology and Biotechnology*, 81(3), 406-412 (2006).
196. R.S. Juang, H.C. Kao and W. Chen, Column removal of Ni(II) from synthetic electroplating waste waters using a strong-acid resin, *Separation and Purification Technology*, 49(1), 36-42 (2006).
197. H.C. Kao, P.S. Yen and R.S. Juang, Solvent extraction of La(III) and Nd(III) from nitrate solutions with 2-ethylhexylphosphonic acid mono-2-ethylhexyl ester, *Chemical Engineering Journal*, 119(2-3), 97-104 (2006).
198. S.H. Lin, R.C. Hsiao and R.S. Juang, Removal of soluble organics from water by a hybrid process of clay adsorption and membrane filtration, *Journal of Hazardous Materials*, 135(1-3), 134-140 (2006).
199. D.S. Mathew and R.S. Juang, Preparation of cobalt ferrite and metal oxide nanoparticles in microemulsions of cetyltrimethylammonium *p*-toluene sulfonate, *Journal of the Chinese Institute of Chemical Engineers*, 37(3), 305-309 (2006).
200. A. Ramesh, D.J. Lee, M.L. Wang, J.P. Hsu, R.S. Juang, K.J. Hwang, J.C. Liu and S.J. Tseng, Biofouling in membrane bioreactor, *Separation Science and Technology*, 41(7), 1345-1370 (2006).

201. M.Y. Teng, S.H. Lin, C.Y. Wu and R.S. Juang, Factors affecting selective rejection of proteins within a binary mixture during cross-flow ultrafiltration, *Journal of Membrane Science*, 281(1-2), 103-110 (2006).
202. S.H. Lin, C.N. Chen and R.S. Juang, Kinetic analysis on reactive extraction of aspartic acid from water in hollow fiber membrane modules, *Journal of Membrane Science*, 281(1-2), 186-194 (2006).
203. R.S. Juang, H.C. Kao and C.L. Shiau, Kinetic analysis on membrane-based reverse micellar extraction of lysozyme from aqueous solutions, *Journal of Membrane Science*, 281(1-2), 636-645 (2006).
204. M.Y. Teng, S.H. Lin and R.S. Juang, Effect of ultrasound on the separation of binary protein mixtures by cross-flow ultrafiltration, *Desalination*, 200(1-3), 280-282 (2006).
205. R.S. Juang and S.Y. Tsai, Role of membrane-attached biofilm in the biodegradation of phenol and sodium salicylate in microporous membrane bioreactors, *Journal of Membrane Science*, 282(1-2), 484-492 (2006).
206. R.S. Juang and S.Y. Tsai, Growth kinetics of *Pseudomonas putida* in the biodegradation of single and mixed phenol and sodium salicylate, *Biochemical Engineering Journal*, 31(2), 133-140 (2006).
207. S.Y. Tsai and R.S. Juang, Biodegradation of phenol and sodium salicylate mixtures by suspended *Pseudomonas putida* CCRC 14365, *Journal of Hazardous Materials*, 138(1), 125-132 (2006).
208. R.S. Juang and S.Y. Tsai, Enhanced biodegradation of mixed phenol and sodium salicylate by *Pseudomonas putida* in membrane contactors, *Water Research*, 40(19), 3517-3526 (2006).
209. R.S. Juang and C.Y. Wu, Microbial degradation of phenol in high-salinity solutions in suspension and hollow fiber membrane contactors, *Chemosphere*, 66(1), 191-198 (2007).
210. D.S. Mathew and R.S. Juang, Role of alcohols in the formation of inverse microemulsions and back extraction of proteins/enzymes in a reverse micellar system (Review), *Separation and Purification Technology*, 53(3), 199-215 (2007).
211. M.Y. Chang and R.S. Juang, Stability and reactivity of acid phosphatase immobilized on the composite beads of chitosan and ZrO₂ powders, *International Journal of Biological Macromolecules*, 40(3), 224-231 (2007).
212. R.S. Juang, H.C. Kao and P.S. Yen, Modeling extraction separation of Nd(III) and La(III) from nitrate media in hollow fiber modules, *American Institute of Chemical Engineers Journal*, 53(3), 561-571 (2007).
213. D.S. Mathew and R.S. Juang, An overview of the structure and magnetism of spinel ferrite nanoparticles and their synthesis in microemulsions (Review), *Chemical Engineering Journal*, 129(1-3), 51-65 (2007).
214. M.Y. Chang and R.S. Juang, Use of chitosan-clay composite as immobilization support for improved activity and stability of β -glucosidase, *Biochemical Engineering Journal*, 35(1), 93-98 (2007).
215. L.C. Lin and R.S. Juang, Ion-exchange kinetics of Cu(II) and Zn(II) ions from aqueous solutions with two chelating resins, *Chemical Engineering Journal*, 132(1-3), 205-213 (2007).

216. H.L. Chen, Y.S. Chen and R.S. Juang, Separation of surfactin from fermentation broths by acid precipitation and two-stage dead-end ultrafiltration processes, *Journal of Membrane Science*, 299(1-2), 114-121 (2007).
217. C.H. Chiou and R.S. Juang, Photocatalytic degradation of phenol in aqueous solutions by the Pr-doped TiO₂ nanoparticles, *Journal of Hazardous Materials*, 149(1), 1-7 (2007).
218. H.L. Chen and R.S. Juang, Recovery and separation of surfactin from pretreated fermentation broths by physical and chemical extraction, *Biochemical Engineering Journal*, 38(1), 39-46 (2008).
219. R.S. Juang, T.P. Chung, M.L. Wang and D.J. Lee, Experimental observations on the effect of added dispersing agent on phenol biodegradation in a microporous membrane bioreactor, *Journal of Hazardous Materials*, 151(2-3), 746-752 (2008).
220. H.L. Chen, Y.S. Chen and R.S. Juang, Recovery of surfactin from fermentation broths by a hybrid salting-out and membrane filtration process, *Separation and Purification Technology*, 59(3), 244-252 (2008).
221. L.C. Lin, J.K. Li and R.S. Juang, Removal of Cu(II) and Ni(II) from aqueous solutions using batch and fixed-bed ion exchange processes, *Desalination*, 225(1-3), 249-259 (2008).
222. R.S. Juang and W.C. Huang, Use of membrane contactors as two-phase bioreactors for the removal of phenol in saline and acidic solutions, *Journal of Membrane Science*, 313(1-2), 207-216 (2008).
223. C.H. Chiou, C.Y. Wu and R.S. Juang, Influence of operating parameters on photocatalytic degradation of phenol in UV/TiO₂ process, *Chemical Engineering Journal*, 139(2), 322-329 (2008).
224. M.Y. Chang, H.C. Kao and R.S. Juang, Thermal inactivation and reactivity of β -glucosidase immobilized on chitosan-clay composite, *International Journal of Biological Macromolecules*, 43(1), 48-53 (2008).
225. H.L. Chen, Y.S. Lee, Y.M. Wei and R.S. Juang, Purification of surfactin in pretreated fermentation broths by adsorptive removal of impurities, *Biochemical Engineering Journal*, 40(3), 452-459 (2008).
226. H.L. Chen, Y.S. Chen and R.S. Juang, Flux decline and membrane cleaning in the cross-flow ultrafiltration of treated fermentation broths for surfactin recovery, *Separation and Purification Technology*, 62(1), 47-55 (2008).
227. R.S. Juang, H.L. Chen and Y.S. Chen, Resistance-in-series analysis in cross-flow ultrafiltration of fermentation broths of *Bacillus subtilis* culture, *Journal of Membrane Science*, 323(1), 193-200 (2008).
228. C.H. Chiou, C.Y. Wu and R.S. Juang, Photocatalytic degradation of phenol and *m*-nitrophenol using irradiated TiO₂ in aqueous solutions, *Separation and Purification Technology*, 62(3), 559-564 (2008).
229. R.S. Juang, H.L. Chen and Y.S. Chen, Membrane fouling and resistance analysis in dead-end ultrafiltration of *Bacillus subtilis* fermentation broths, *Separation and Purification Technology*, 63(3), 531-538 (2008).
230. S.H. Lin, C.L. Hung and R.S. Juang, Applicability of the exponential time dependence of flux decline during dead-end ultrafiltration of binary protein solutions, *Chemical Engineering Journal*, 145(2), 211-217 (2008).

231. S.H. Lin, C.L. Hung and R.S. Juang, Effect of operating parameters on the separation of proteins in aqueous solutions by dead-end ultrafiltration, *Desalination*, 234(1-3), 116-125 (2008).
232. H.L. Chen and R.S. Juang, Extraction of surfactin from fermentation broths with *n*-hexane in microporous PVDF hollow fibers: Significance of membrane adsorption, *Journal of Membrane Science*, 325(2), 599-604 (2008).
233. H.L. Chen, H.C. Kao and R.S. Juang, Phenol biodegradation by membrane-attached biofilm in hollow fiber modules, *Journal of Biotechnology*, 136S, S673 (2008).
234. R.S. Juang and H.C. Kao, Estimation of the contribution of immobilized biofilm and suspended biomass to the biodegradation of phenol in membrane contactors, *Biochemical Engineering Journal*, 43(2), 122-128 (2009).
235. S.H. Lin and R.S. Juang, Adsorption of phenol and its derivatives from water using synthetic resins and low cost natural adsorbents: A review, *Journal of Environmental Management*, 90(3), 1336-1349 (2009).
236. R.S. Juang, W.C. Huang and Y.H. Hsu, Treatment of phenol in synthetic saline wastewater by solvent extraction and two-phase membrane biodegradation, *Journal of Hazardous Materials*, 164(1), 46-52 (2009).
237. S.H. Lin, C.N. Chen and R.S. Juang, Structure and thermal stability of toxic chromium(VI) species doped onto TiO₂ powders through heat treatment, *Journal of Environmental Management*, 90(5), 1950-1955 (2009).
238. F.C. Wu, R.L. Tseng and R.S. Juang, Characteristics of the Elovich equation used for the analysis of adsorption kinetics in dye-chitosan systems, *Chemical Engineering Journal*, 150(2-3), 366-373 (2009).
239. F.C. Wu, R.L. Tseng, S.C. Huang and R.S. Juang, Characteristics of the pseudo-second-order kinetic model for liquid-phase adsorption: A mini-review, *Chemical Engineering Journal*, 151(1-3), 1-9 (2009).
240. R.L. Tseng, F.C. Wu and R.S. Juang, Initial behavior of intraparticle diffusion model used in the description of adsorption kinetics, *Chemical Engineering Journal*, 153(1-3), 1-8 (2009).
241. S.H. Lin, M.Y. Teng and R.S. Juang, Adsorption of surfactants from water onto raw and HCl-activated clays in fixed beds, *Desalination*, 249(1), 116-122 (2009).
242. C.W. Ooi, B.T. Tey, S.L. Hii, A. Ariff, H.S.Wu, J.C.W. Lan, R.S. Juang, S.M.M. Kamal and T.C. Ling, Direct purification of *Burkholderia pseudomallei* lipase from fermentation broth using aqueous two-phase systems, *Biotechnology and Bioprocess Engineering*, 14(6), 811-818 (2009).
243. F.C. Wu, R.L. Tseng and R.S. Juang, A review and experimental verification of using chitosan and its derivatives as adsorbents for selected heavy metals, *Journal of Environmental Management*, 91(4), 798-806 (2010).
244. R.C. Hsiao, N.S. Arul, D. Mangalaraj and R.S. Juang, Influence of Eu³⁺ doping on the degradation property of TiO₂ nanostructures, *Journal of Optoelectronics and Advanced Materials*, 12(2), 193-198 (2010).
245. R.S. Juang, H.C. Kao and K.J. Tseng, Kinetics of phenol removal from saline solutions by solvent extraction coupled with degradation in a two-phase partitioning bioreactor, *Separation and Purification Technology*, 71(3), 285-292 (2010).
246. F.C. Wu, P.H. Wu, R.L. Tseng and R.S. Juang, Preparation of activated carbons from un-burnt coal in bottom ash with KOH activation for liquid-phase adsorption, *Journal of Environmental Management*, 91(5), 1097-1102 (2010).

247. R.S. Juang and K.J. Tseng, Experimental investigation of bio-removal of toxic organic pollutants from highly saline solutions in a triphasic system, *Journal of Hazardous Materials*, 178(1-3), 706-712 (2010).
248. R.S. Juang, S.H. Lin and L.C. Peng, Flux decline analysis in micellar-enhanced ultrafiltration of synthetic waste solutions for metal removal, *Chemical Engineering Journal*, 161(1-2), 19-26 (2010).
249. R.L. Tseng, K.T. Wu, F.C. Wu and R.S. Juang, Kinetic studies on the adsorption of phenol, 4-chlorophenol, and 2,4-dichlorophenol from water using activated carbons, *Journal of Environmental Management*, 91(11), 2208-2214 (2010).
250. R.S. Juang, S.H. Lin and P.Y. Hsueh, Removal of binary azo dyes from water by UV-irradiated degradation in TiO₂ suspensions, *Journal of Hazardous Materials*, 182(1-3), 820-826 (2010).
251. R.S. Juang, H.L. Chen and Y.C. Lin, Recovery and concentration of prodigiosin from pretreated fermentation broths by low-pressure ultrafiltration, *Journal of Biotechnology*, 150(Supplement 1), S369-S370 (2010).
252. F.C. Wu, R.L. Tseng, K.C. Huang and R.S. Juang, Characteristics and applications of the Lagergren's first-order equation for adsorption kinetics, *Journal of the Taiwan Institute of Chemical Engineers*, 41(6), 661-669 (2010).
253. C. Huang, C.Y. Tsai, R.S. Juang and H.C. Kao, Tailoring surface properties of cellulose acetate membranes by low pressure plasma processing, *Journal of Applied Polymer Science*, 118(6), 3227-3235 (2010).
254. F.C. Wu, P.H. Wu, R.L. Tseng and R.S. Juang, Preparation of novel activated carbons from H₂SO₄-treated corncob hulls with KOH activation for quick adsorption of dye and 4-chlorophenol, *Journal of Environmental Management*, 92(3), 708-713 (2011).
255. R.L. Tseng, P.H. Wu, F.C. Wu and R.S. Juang, Half-life and half-capacity concentration approach for adsorption of 2,4-dichlorophenol and methyl blue from water on activated carbons, *Journal of the Taiwan Institute of Chemical Engineers*, 42(2), 312-319 (2011).
256. R.C. Hsiao, C.L. Hung, S.H. Lin and R.S. Juang, Separation and flux characteristics in cross-flow ultrafiltration of bovine serum albumin and bovine hemoglobin solutions, *Membrane Water Treatment*, 2(2), 91-103 (2011).
257. C.Y. Tsai, R.S. Juang and C. Huang, Surface modification of polypropylene membrane by RF methane/oxygen mixture plasma treatment, *Japanese Journal of Applied Physics*, 50(8), 08KA02 (2011).
258. S.H. Lin, C.H. Chiou, C.K. Chang and R.S. Juang, Photocatalytic degradation of phenol on different phases of TiO₂ particles in aqueous suspensions under UV irradiation, *Journal of Environmental Management*, 92(12), 3098-3104 (2011).
259. S.H. Huang and R.S. Juang, Biochemical and biomedical applications of multifunctional magnetic nanoparticles: A review, *Journal of Nanoparticle Research*, 13(10), 4411-4430 (2011).
260. C.T. Hsieh, B.S. Chang, J.Y. Lin and R.S. Juang, Improvement of rate capability of spinel lithium titanate anodes using microwave-assisted zinc nanocoating, *Journal of Alloys and Compounds*, 513, 393-398 (2012).
261. R.S. Juang, H.L. Chen and S.C. Tsao, Recovery and separation of surfactin from pretreated *Bacillus subtilis* broth by reverse micellar extraction, *Biochemical Engineering Journal*, 61, 78-83 (2012).

262. C. Huang, C.Y. Tsai and R.S. Juang, Surface modification and characterization of H₂/O₂ plasma treated polypropylene membrane, *Journal of Applied Polymer Science*, 124(S1), E108-E115 (2012).
263. R.S. Juang, H.C. Kao and Z. Zhang, A simplified dynamic model for the removal of toxic organics in a two-phase partitioning bioreactor, *Separation and Purification Technology*, 90, 213-220 (2012).
264. R.S. Juang, H.L. Chen and Y.C. Lin, Ultrafiltration of coagulation-pretreated *Serratia marcescens* fermentation broth: Flux characteristics and prodigiosin recovery, *Separation Science and Technology*, 47(13), 1849-1856 (2012).
265. T.A. Nguyen and R.S. Juang, Treatment of waters and wastewaters containing sulfur dyes: A review, *Chemical Engineering Journal*, 219, 109-117 (2013).
266. K.T. Wu, P.H. Wu, F.C. Wu, R.L. Tseng and R.S. Juang, A novel approach to characterizing liquid-phase adsorption on highly porous activated carbons using the Toth equation, *Chemical Engineering Journal*, 221, 373-381 (2013).
267. C. Huang, C.C. Lin, C.Y. Tsai and R.S. Juang, Tailoring surface properties of polymeric separators for lithium-ion batteries by cyclonic atmospheric-pressure plasma, *Plasma Processes and Polymers*, 10(5), 407-415 (2013).
268. P.T. Tran, H.C. Kao, R.S. Juang and J.C.W. Lan, Kinetic characteristics of biodegradation of methyl orange by *Pseudomonas putida* mt2 in suspended and immobilized cell systems, *Journal of the Taiwan Institute of Chemical Engineers*, 44(5), 780-785 (2013).
269. C. Huang, W.C. Ma, C.Y. Tsai, W.T. Hou and R.S. Juang, Surface modification on poly(tetrafluoroethylene) membrane by radio frequency methane/nitrogen mixture plasma polymerization, *Surface & Coatings Technology*, 231, 42-46 (2013).
270. C.L. Liu, T.H. Lin and R.S. Juang, Optimization of recombinant hexaoligochitin-producing chitinase production with response surface methodology, *International Journal of Biological Macromolecules*, 62, 518-522 (2013).
271. C. Huang, P.J. Lin, C.Y. Tsai and R.S. Juang, Electrospun microfibrinous membranes with atmospheric- pressure plasma surface modification for the application in dye-sensitized solar cells, *Plasma Processes and Polymers*, 10(11), 938-947 (2013).
272. C.H. Liang, R.S. Juang, C.Y. Tsai and C. Huang, Tailoring surface properties of polymer separators for lithium-ion batteries by 13.56 MHz RF plasma glow discharge, *Japanese Journal of Applied Physics*, 52(11), 11NM07 (2013).
273. R.L. Tseng, P.H. Wu, F.C. Wu and R.S. Juang, A convenient method to determine kinetic parameters of adsorption processes by nonlinear regression of pseudo-*n*-th-order equation, *Chemical Engineering Journal*, 237, 153-161 (2014).
274. C.T. Hsieh, C.T. Pai, Y.F. Chen, P.Y. Yu and R.S. Juang, Electrochemical performance of lithium iron phosphate cathodes at various temperatures, *Electrochimica Acta*, 115, 96-102 (2014).
275. R.S. Juang and C.H. Chen, Comparative study on photocatalytic degradation of methomyl and parathion over UV-irradiated TiO₂ particles in aqueous solutions, *Journal of the Taiwan Institute of Chemical Engineers*, 45(3), 989-995 (2014).
276. R.S. Juang and C.L. Yeh, Adsorptive recovery and purification of prodigiosin from methanol/water solutions of *Serratia marcescens* fermentation broth, *Biotechnology and Bioprocess Engineering*, 19(1), 159-168 (2014).

277. C.L. Liu, C.Y. Lan, C.C. Fu and R.S. Juang, Production of hexaoligochitin from colloidal chitin using a chitinase from *Aeromonas schubertii*, *International Journal of Biological Macromolecules*, 69, 59-63 (2014).
278. F.C. Wu, P.H. Wu, R.L. Tseng and R.S. Juang, Description of gas adsorption isotherms on activated carbons with heterogeneous micropores using the Dubinin-Astakhov equation, *Journal of the Taiwan Institute of Chemical Engineers*, 45(4), 1757-1763 (2014).
279. R.S. Juang, C. Huang and C.L. Hsieh, Surface modification of PVDF ultrafiltration membranes by remote argon/ methane gas mixture plasma for fouling reduction, *Journal of the Taiwan Institute of Chemical Engineers*, 45(5), 2176-2186 (2014).
280. F.C. Wu, P.H. Wu, R.L. Tseng and R.S. Juang, Use of refuse-derived fuel waste for adsorption of 4-chlorophenol and dyes from aqueous solution: Equilibrium and kinetics, *Journal of the Taiwan Institute of Chemical Engineers*, 45(5), 2628-2639 (2014).
281. C.Y. Tsai, T.C. Wei, K.S. Chen, R.S. Juang and C. Huang, Tailoring surface properties of non-woven polypropylene by cyclonic atmospheric pressure plasma, *IEEE Transactions on Plasma Science*, 42(12), 3668-3673 (2014).
282. R.S. Juang, C.Y. Tsai, T.C. Wei, K.S. Chen, C.H. Liu, H.Y. Jheng and C. Huang, Surface characterization of cyclonic methane/argon mixture plasma-treated poly(vinylidene fluoride) filtration membrane and its flux enhancement, *IEEE Transactions on Plasma Science*, 42(12), 3698-3702 (2014).
283. R.S. Juang, C.H. Liang, W.C. Ma, C.Y. Tsai and C. Huang, Low-pressure ethane/nitrogen gas mixture plasma surface modification effect on the wetting and electrochemical performance of polymer separator for lithium-ion batteries, *Journal of the Taiwan Institute of Chemical Engineers*, 45(6), 3046-3051 (2014).
284. A.T. Nguyen and R.S. Juang, Photocatalytic degradation of *p*-chlorophenol by hybrid H₂O₂ and TiO₂ in aqueous suspensions under UV irradiation, *Journal of Environmental Management*, 147, 271-277 (2015).
285. R.S. Juang, C.T. Hsieh, J.Q. Hsiao, H.T. Hsiao, D.Y. Tzou and M.M. Huq, Size-controlled platinum nanoparticles prepared by modified-version atomic layer deposition for ethanol oxidation, *Journal of Power Sources*, 275, 845-851 (2015).
286. R.L. Tseng, F.C. Wu and R.S. Juang, Adsorption of CO₂ at atmospheric pressure on activated carbons prepared from melamine-modified phenol-formaldehyde resins, *Separation and Purification Technology*, 140, 53-60 (2015).
287. C.T. Hsieh, J.R. Liu, R.S. Juang, C.E. Lee and Y.F. Chen, Microwave synthesis of copper network onto lithium iron phosphate cathode materials for improved electrochemical performance, *Materials Chemistry and Physics* (in press, 2015).