(1) C. H. Huang and M. N. Ozisik, "A Direct Integration Approach for Simultaneously Estimating Spatially Varying Thermal Conductivity and Heat Capacity", Int. J. of Heat and Fluid Flow (SCI&EI paper), Vol. 11, No. 3, pp.262-268, 1990.

(2) C. H. Huang and M. N. Ozisik, "A Direct Integration Approach for Simultaneously Estimating Temperature Dependent Thermal Conductivity and Heat Capacity", Numerical Heat Transfer, Part A (SCI&EI paper), Vol. 20, No. 1, pp.95-110, 1991.

(3) C. H. Huang and M. N. Ozisik, "Optimal Regularization Method to Determine the Unknown Strength of A Surface Heat Source ", Int. J. of Heat and Fluid Flow (SCI&EI paper), Vol. 12, No. 2, pp.173-178, 1991.

(4) C. H. Huang and M. N. Ozisik, "Inverse Problem of Determining Unknown Wall Heat Flux in Laminar Flow Through A Parallel Plate Duct", Numerical Heat Transfer, Part A (SCI&EI paper), Vol. 21, No. 1, pp.55-70, 1992.

(5) C. H. Huang, M. N. Ozisik and B. Sawaf, "Conjugate Gradient Method for Determining Unknown Contact Conductance During Metal Casting", Int. J. of Heat and Mass Transfer (SCI&EI paper), Vol. 35, No. 7, pp.1779-1786, 1992.

(6) C. H. Huang and M. N. Ozisik, "Inverse Problem of Determining the Unknown Strength of an Internal Plane Heat Source", Journal of the Franklin Institute (SCI&EI paper), Vol. 329, No. 4, pp.751-764, 1992.

(7) C. H. Huang and M. C. Huang, "Inverse Problem in Determining the Normal and Tangential Drag Coefficients of Marine Cables", J. Ship Research (SCI&EI paper), Vol. 38, No. 4, pp. 296-301, 1994.

(8) C. H. Huang and J. Y. Wu, "An Inverse-Problem of Determining Two Boundary Heat Fluxes in Unsteady Heat Conduction of Thick-Walled Circular Cylinder", Inverse Problems in Engineering (SCI&EI paper), Vol. 1, pp. 133-151, 1995, NSC-82-0209-E-006-444.

(9) C. H. Huang and J. Y. Wu, "Two-Dimensional Inverse Problem in Estimating Heat Fluxes of an Enclosure with Unknown Internal Heat Sources", J. Applied Physics (SCI&EI paper), Vol. 76, No. 1, pp. 133-141, 1994, NSC-82-0209-E-006-444.

(10) C. H. Huang and T. M. Ju, "An Inverse Problem of Simultaneously Estimating Contact Conductance and Heat Transfer Coefficient of Exhaust Gases Between Engine's Exhaust Value and Seat", Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 38, No. 5, pp. 735-754, 1995, NSC-81-0403-E-006-614.

(11) C. H. Huang, T. M. Ju and A. A. Tseng, "The Estimation of Surface Thermal Behavior of Working Roll in Hot Rolling Process", Int, J. Heat and Mass Transfer (SCI&EI paper), Vol. 38, No. 6, pp. 1019-1031, 1995, NSC-83-0401-E-006-007.

(12) C. H. Huang and J. Y. Yan, "An Inverse Problem in Simultaneously Measuring Temperature Dependent Thermal Conductivity and Heat Capacity", Int. J. Heat and

Mass Transfer (SCI&EI paper), Vol. 38. No. 18, pp. 3433-3441, 1995, NSC-85-2212-E-006-027.

(13) C. H. Huang , J. Y. Yan and H. T. Chen, "The Function Estimation in Predicting Temperature Dependent Thermal Conductivity without Internal Measurements", AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 9, No. 4, pp. 667-673, October-December, 1995, NSC-85-2212-E-006-027.

(14) C. H. Huang and J. Y. Yan, "The Function Estimation in Measuring Temperature Dependent Thermal Conductivity in Composite Material", J. of Applied Physics (SCI&EI paper), Vol. 78, No. 12, pp. 6949-6956, 1995, NSC-85-2212-E-006-027.

(15) C. H. Huang and J. Y. Yan , "An Inverse Problem in Predicting Temperature Dependent Heat Capacity Per Unit Volume without Internal Measurements", Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 39, pp. 606-618, 1996, NSC-85-2212-E-006-027.

(16) C. H. Huang and Y. C. Wang , "The Estimation of Solid-Liquid Moving Front Position During Metal Casting", Proceedings of NSC (EI paper), Vol. 20, No.26, pp. 194-203, 1996, NSC-82-0401-E-006-337.

(17) C. H. Huang and Y. C. Wang , "Inverse Problem of Controlling the Interface Velocity in Stefan Problems by Conjugate Gradient Method", J. Chinese Institute Engineers (EI paper), Vol. 19, No. 2, pp. 247-253, 1996, NSC-82-0401-E-006-337.

(18) H. T. Chen, J. Y. Lin, C. H. Wu and C. H. Huang, "Numerical Algorithm for Estimating Temperature-Dependent Thermal Conductivity", Numerical Heat Transfer; Part B (SCI&EI paper), Vol. 29, pp. 509-522, 1996.

(19)C. H. Huang and D. M. Wang, "Statistical Consideration for the Estimation of Spatially Varying Sound Velocity and Water Density in Acoustic Inversion", Inverse Problems in Engineering (SCI&EI paper), Vol. 4, pp. 129-151, 1996.

(20) C. H. Huang and B. H. Chao, "An Inverse Geometry Problem in Identifying Irregular Boundary Configurations", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 40, No. 9, pp. 2045-2053, 1997. NSC-86-2611-E-006-002.

(21) C. H. Huang and D. M. Wang, ”A Statistical Analysis for An Inverse Acoustic Problem in Estimating Spatially Varying Sound Velocity”, J. Acoustical Society of American (SCI &EI paper), Vol. 101, No. 3, pp. 1262-1268, 1997.

(22) C. H. Huang and W. Y. Shih, “A Boundary Element Based Solution of An Inverse Elasticity Problem by Conjugate Gradient and Regularization Method”, Inverse Problems in Engineering (SCI&EI paper), Vol. 4, pp. 295-321, 1997.

(23) C. H. Huang and C. W. Chen, “A Boundary Element Based Inverse Problem of Estimating Boundary Condition in An Irregular Domain with Statistical Analysis”, Numerical Heat Transfer; Part B (SCI &EI paper), Vol. 33, No. 2, pp. 251-268, 1998. NSC-87-2611-E-006-026.

(24) C. H. Huang and C. C. Tsai, " A Transient Inverse Two-Dimensional Geometry Problem in Estimating Time-Dependent Irregular Boundary Configurations ", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 41, No. 12, pp. 1707-1718, 1998. NSC-87-2212-E-006-107.

(25) C. H. Huang, C. C. Chiang and H. M. Chen, " Shape Identification Problem in Estimating the Geometry of Multiple Cavities ", AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 12, No. 2, April-June, pp. 270-277, 1998. NSC-87-2212-E-006-107.

(26) C. H. Huang, C. C. Chiang and S. K. Chou, " An Inverse Geometry Design Problem in Optimizing the Hull Surfaces", Journal of Ship Research (SCI &EI paper), Vol. 42, No. 2, pp. 79-85, 1998. NSC-87-2611-E-006-026.

(27) C. H. Huang and C. W. Chen, " A Boundary Element Based Inverse-Problem in Estimating Transient Boundary Conditions with Conjugate Gradient Method ", Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 42, pp. 943-965, 1998. NSC-87-2611-E-006-026.

(28) J. D. Chen, et al and C. H. Huang, " Estimation of the Profile of Hearth Erosion for No. 1 Blast Furnace at CSC ", China Steel Technical Report, No. 11, 1998.

(29) C. H. Huang and C. C. Tsai, “An Inverse Heat Conduction Problem of Estimating Boundary Fluxes in An Irregular Domain with Conjugate Gradient Method”, Heat and Mass Transfer (SCI&EI paper), Vol. 34, No. 1, pp. 47-54, 1998. NSC-87-2212-E-006-107.

(30) C. H. Huang, D. M. Wang and H. M. Chen, “Prediction of Local Thermal Contact Conductance in Plate Finned-Tube Heat Exchangers”, Inverse Problems in Engineering, (SCI&EI paper), Vol. 7, No. 2, pp. 119-141, 1999. NSC-85-2212-E-006-079.

(31) C. H. Huang and H. M. Chen, “An Inverse Geometry Problem of Identifying Growth of Boundary Shapes in A Multiple Region Domain”, Numerical Heat Transfer; Part A (SCI&EI paper), Vol. 35, pp. 435-450, 1999. NSC-88-2212-E-006-048.

(32) C. H. Huang and W. Y. Shih, “An Inverse Problem in Estimating Interfacial Cracks in Bimaterials by Boundary Element Technique”, Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 45, No.11, pp. 1547-1576, 1999. NSC-88-2212-E-006-048.

(33) C. H. Huang and S. P. Wang, “A Three-Dimensional Inverse Heat Conduction Problem in Estimating Surface Heat Flux by Conjugate Gradient Method”, Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 42, No. 18, pp. 3387-3403, 1999. NSC-88-2611-E-006-004.

(34) C. H. Huang and T. Y. Hsiung, “An Inverse Design Problem of Estimating Optimal

Shape of Cooling Passages in Turbine Blades", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 42, No. 23, pp. 4307-4319, 1999. NSC-88-2611-E-006-004.

(35) C. H. Huang and W. C. Chen, "A Three-Dimensional Inverse Forced Convection Problem in Estimating Surface Heat Flux by Conjugate Gradient Method", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 43, No. 17, pp. 3171-3181, 2000. NSC-88-2611-E-006-004.

(36) C. H. Huang and S. C. Chin, "A Two-Dimensional Inverse Problem in Imaging the Thermal Conductivity of a Non-homogeneous Medium", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 43, No. 22, pp. 4061-4071, 2000. NSC-89-2611-E-006-004.

(37) C. H. Huang, "A Nonlinear Inverse Vibration Problem of Estimating the Time-Dependent Stiffness Coefficients by Conjugate Gradient Method", Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 50, pp. 1545-1558, 2001. NSC-89-2611-E-006-027.

(38) H. M. Chen and C. H. Huang, "A System Identification Problem of Estimating Parameters in the Profit Analysis Model for a Product", Int. J. Production Economics (SSCI paper), Vol. 72, pp. 15-26, 2001.

(39) C. H. Huang, "An Inverse Nonlinear Force Vibration Problem of Estimating the External Forces in a Damped System with Time-Dependent System Parameters", J. Sound and Vibration (SCI&EI paper), Vol. 242, No. 5, pp. 749-756, 2001.

(40) C. H. Huang, G. C. Hsu and J. Y. Jang, "A Nonlinear Inverse Problem for the Prediction of Local Thermal Contact Conductance in Plate Finned-Tube Heat Exchangers", Heat and Mass Transfer (SCI &EI paper), Vol. 37, No. 4-5, pp. 351-359, 2001. NSC-87-2212-E-006-107.

(41) C. H. Huang and S. C. Cheng, "A Three-Dimensional Inverse Problem of Estimating the Volumetric Heat Generation for A Composite Material", Numerical Heat Transfer, Part A, (SCI&EI paper), Vol. 39, pp. 383-403, 2001. NSC-89-2212-E-006-143.

(42) C. H. Huang, "An Optimal Control Problem in Estimating the Optimal Control Force for the Force Vibration System", Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 52, pp. 1323-1335, 2001. NSC-89-2611-E-006-058.

(43) C. H. Huang and S. C. Cheng, "Three-Dimensional Inverse Estimation of Heat Generation in Board Mounted Chips", AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 15, No. 4, pp. 439-446, October-December, 2001. NSC-89-2212-E-006-143.

(44) C. H. Huang and C. H. Huang, "An Inverse Design Problem of Optimizing the Boundary Shapes", Journal of the Society of Naval Architects and Marine Engineers (EI paper), Vol. 20, No. 2, pp. 51-62, 2001. NSC-89-2611-E-006-027.

(45) C. H. Huang, “A Nonlinear Inverse Vibration Problem of Estimating the External Forces for A System with Displacement-Dependent Parameters”, J. Sound and Vibration (SCI&EI paper), Vol. 248, No. 5, pp. 789-807, 2001, NSC-89-2611-E-006-058.

(46) C. H. Huang, “A Non-linear Optimal Control Problem in Determining the Strength of the Optimal Boundary Heat Fluxes”, Numerical Heat Transfer, Part B, (SCI&EI paper), Vol. 40, No. 5, pp. 411-429, 2001, NSC-89-2212-E-006-143.

(47) C. H. Huang, “An Inverse Geometry Problem in Estimating Frost Growth on An Evaporating Tube”, Heat and Mass Transfer, (SCI&EI paper), Vol. 38, No. 7, pp. 615-623, 2002, NSC-87-2212-E-006-107.

(48) P. F. Chen and C. H. Huang, " An Inverse Hull Design Problem in Optimizing the Desired Wake of Ships", Journal of Ship Research (SCI &EI paper), Vol. 46, No. 2, pp. 138-147, 2002, NSC-90-2611-E-006-022.

(49) C. H. Huang and C. Y. Yeh, "An Inverse Problem in Simultaneous Estimating the Biot Numbers of Heat and Moisture Transfer for A Porous Material", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 45, No. 23, pp. 4643-4653, 2002, NSC-90-2611-E-006-012.

(50) C. H. Huang and C. Y. Li, "A Three-Dimensional Optimal Control Problem in Determining the Boundary Control Heat Fluxes", Heat and Mass Transfer (SCI &EI paper), Vol. 39, No. 7, pp. 589-598, 2003, NSC-89-2212-E-006-143.

(51) C. H. Huang and J. H. Hsiao, "An Inverse Design Problem in Determining the Optimum Shape of Spine and Longitudinal Fins", Numerical Heat Transfer, Part A, (SCI&EI paper), Vol. 43, pp. 155-177, 2003, NSC-90-2611-E-006-012.

(52) C. H. Huang and C. Y. Yeh, "An Optimal Control Algorithm for Entrance Concurrent Flow Problems", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 46, No. 6 pp. 1013-1027, 2003, NSC-90-2611-E-006-022.

(53) C. H. Huang and J. H. Hsiao, "A Non-linear Fin Design Problem in Determining the Optimum Shape of Spine and Longitudinal Fins", Communications in Numerical Methods in Engineering (SCI &EI paper), Vol. 19, No. 2, pp. 111-124, 2003, NSC-90-2611-E-006-012.

(54) C. H. Huang, "An Inverse Vibration Problem for Simultaneously Estimating the Time-Dependent Stiffiness Coefficients", Journal of the Society of Naval Architects and Marine Engineers (EI paper), Vol. 22, No. 3, pp. 113-122, 2003, NSC-89-2611-E-006-058.

(55) C. H. Huang and C. Y. Li, “Optimal Heating for A Three-Dimensional Forced Convection Problem in Determining the Optimal Surface Heat Fluxes”, AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 17, No. 3, pp. 381-388, 2003, NSC-89-2212-E-006-143.

(56) C. H. Huang, I. C. Yuan and Herchang Ay, " A Three-Dimensional Inverse Problem in Imaging the Local Heat Transfer Coefficients for Plate Finned-tube Heat Exchangers ", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 46, No. 19, pp. 3629-3638, 2003, NSC-91-2611-E-006-015.

(57) C. H. Huang, " An Optimal Control Problem for A Generalized Vibration System in Estimating Simultaneously the Optimal Control Forces ", Journal of the Franklin Institute (SCI&EI paper), Vol. 340, No. 5, pp. 327-347, 2003, NSC-89-2611-E-006-058.

(58) C. H. Huang, C. Y. Yeh and Helcio R. B. Orlande, "A Non-Linear Inverse Problem in Simultaneously Estimating the Heat and Mass Production Rates for A Chemically Reacting Fluid", Chemical Engineering Science (SCI&EI paper), Vol. 58, No. 16, pp. 3741-3752, 2003, NSC-91-2611-E-006-003.

(59) P. F. Chen and C. H. Huang, "An Inverse Hull Design Approach in Minimizing the Ship Wave", Ocean Engineering (SCI &EI paper), Vol. 31, No. 13, pp. 1683-1712, 2004, NSC-91-2611-E-006-004.

(60) C. H. Huang and C. Y. Huang, "An Inverse Biotechnology Problem in Estimating the Optical Diffusion and Absorption Coefficients of Tissue ", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 47, No. 3, pp. 447-457, 2004, NSC-91-2611-E-006-015.

(61) C. H. Huang and T. T. Chen, " An Optimal Control Problem for Controlling the Cell Volume in Dehydration and Rehydration Process ", Int. J. Heat and Mass Transfer (SCI &EI paper), Vol. 47, No.17-18, pp. 3607-3616, 2004, NSC-91-2611-E-006-015.

(62) C. H. Huang and T. T. Chen, " An Optimal Control Problem for Cryoperservation of Cells Using Ultra-Rapid Freezing Technique", Numerical Heat Transfer, Part A, (SCI&EI paper), Vol. 46, No. 7, pp. 695-715, 2004, NSC-91-2611-E-006-003.

(63) C. H. Huang and S. Kim, " An Inverse Problem for Estimating the Time-Dependent Reaction Coefficient in an Autocatalytic Reaction Pathway", Chemical Engineering Science (SCI&EI paper), Vol. 60, pp. 447-457, 2005, NSC-91-2611-E-006-003.

(64) H. M. Chen and C. H. Huang, " An Inverse European Option Problem in Estimating the Time-Dependent Volatility Function with Statistical Analysis ", Int. J. of Systems Science (SCI&EI paper), Vol. 36, No. 2, pp. 103-111, 2005, NSC-90-2416-H-168-001.

(65) C. H. Huang and C. C. Shih, "Identify the Interfacial Configurations in a Multiple Region Domain Problem", AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 19, No. 4, pp. 533-541, 2005, NSC-92-2611-E-006-015.

(66) C. H. Huang and Y. L. Tsai, " A Transient 3-D Inverse Problem in Imaging the Time-dependent Local Heat Transfer Coefficients for Plate Fin ", Applied Thermal

Engineering (SCI&EI paper), Vol. 25, No. 14-15, pp. 2478-2495, 2005, NSC-92-2611-E-006-015.

(67) C. H. Huang, " A Generalized Inverse Force Vibration Problem for Simultaneously Estimating the Time-Dependent External Forces ", Applied Mathematical Modelling (SCI&EI paper), Vol. 29, pp. 1022–1039, 2005, NSC-89-2611-E-006-058.

(68) C. H. Huang, " A Nonlinear Inverse Problem in Estimating Simultaneously the External Forces for A Vibration System with Displacement-Dependent Parameters ", Journal of the Franklin Institute (SCI&EI paper), Vol. 342, pp. 793-813, 2005.

(69) C. H. Huang and H. C. Lo, “A Three-Dimensional Inverse Problem in Predicting the Heat Fluxes Distribution in the Cutting Tools”, Numerical Heat Transfer, part A-Applications (SCI&EI paper), Vol. 48, No. 10, 1009-1034, 2005, NSC-93-2611-E-006-015.

(70) P. F. Chen, C. H. Huang, M. C. Fang and J. H. Chou, " An Inverse Design Approach in Determining the Optimal Shape of Bulbous Bow with Experimental Verification", Journal of Ship Research (SCI &EI paper), Vol. 50, No. 1, pp. 1-14, March 2006, NSC-92-2611-E-006-015.

(71) C. H. Huang and C. C. Shih, " A Shape Identification Problem in Estimating Simultaneously Two Interfacial Configurations in a Multiple Region Domain ", Applied Thermal Engineering (SCI&EI paper), Vol. 26, No. 1, pp. 77–88, 2006, NSC-93-2611-E-006-015.

(72) S. Kim and C. H. Huang, " The approximate solutions to the non-linear heat conduction problems in a semi-infinite medium ", Heat and Mass Transfer (SCI &EI paper), Vol. 42, No. 8, pp. 727–738, 2006.

(73) C. H. Huang and H. C. Lo, “Optimal Inverse Design Problem in Determining Cooling Conditions for High-Speed Motors”, AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 20, No. 3, July–September, pp. 429–438, 2006.

(74) C. H. Huang and H. C. Lo, “A Three-Dimensional Inverse Problem in Estimating the Internal Heat Flux of Housing for High Speed Motors”, Applied Thermal Engineering (SCI&EI paper), Vol. 26, No. 14-15, pp.1515–1529, 2006.

(75) C. H. Huang and J. X. Li, “A Non-Linear Optimal Control Problem in Obtaining Homogeneous Concentration for Semiconductor Materials”, Journal of Physics D: Applied Physics, (SCI&EI paper), Vol. 39, pp. 2343–2351, 2006, NSC-94-2611-E-006-003.

(76) C. H. Huang and H. H. Wu, “An Inverse Hyperbolic Heat Conduction Problem in Estimating Surface Heat Flux by Conjugate Gradient Method”, Journal of Physics D: Applied Physics, (SCI&EI paper), Vol. 39, pp. 4087–4096, 2006, NSC-95-2221-E-006-469.

(77) C. H. Huang and H. H. Wu, “An Iterative Regularization Method in Estimating the Base Temperature for Non-Fourier Fins”, Int. J. Heat and Mass Transfer (SCI&EI paper), Vol. 49, No. 25-26, pp. 4893–4902, 2006. NSC-94-2611-E-006-021.

(78) S. Kim and C. H. Huang, “A series solution of the fin problem with a temperature-dependent thermal conductivity”, Journal of Physics D: Applied Physics, (SCI&EI paper), Vol. 39, pp. 4894-4901, 2006. NSC-94-2611-E-006-021.

(79) C. H. Huang and K.Y. Chen, “An Iterative Regularization Method for Inverse Phonon Radiative Transport Problem in Nanoscale Thin Films”, Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 69, No. 7, pp. 1499–1520, 2007. NSC-94-2611-E-006-021.

(80) C. H. Huang and C. Y. Huang, "An Inverse Problem in Estimating Simultaneously the Effective Thermal Conductivity and Volumetric Heat capacity of Biological Tissue ", Applied Mathematical Modelling (SCI&EI paper), Vol. 31, pp. 1785–1797, 2007. NSC-92-2611-E-006-007.

(81) C. H. Huang and K.Y. Chen, “An Inverse Phonon Radiative Transport Problem in Estimating the Boundary Temperatures for A Double-Layer Nanoscale Thin-Film”, Numerical Heat Transfer, Part A---Applications (SCI&EI paper), Vol. 52, No. 1, pp. 43-70, 2007. NSC-94-2611-E-006-021.

(82) C. H. Huang, L. C. Jan, R. Li and A. J. Shih “A Three-Dimensional Inverse Problem in Estimating the Applied Heat Flux of a Titanium Drilling -- Theoretical and Experimental Studies”, Int. J. Heat and Mass Transfer, Vol. 50, No. 17-18, pp. 3265-3277 (SCI&EI paper), 2007. NSC-94-2611-E-006-003.

(83) S. Kim and C. H. Huang, “A Series Solution of the Non-Linear Fin Problem with Temperature-Dependent Thermal Conductivity and Heat Transfer Coefficient”, Journal of Physics D: Applied Physics, (SCI&EI paper), Vol. 40, pp. 2979–2987, 2007.

(84) L. F. Saker, H. R. B. Orlande, C. H. Huang, G. H. Kanevce and L. P. Kanevce, “Simultaneous Estimation of the Spacewise and Timewise Variations of Mass and Heat Transfer Coefficients in Drying”, Inverse Problems in Science and Engineering, (SCI&EI paper), Vol. 15, No. 2, pp. 137-150, 2007.

(85) C. H. Huang and H. H. Wu, “A Fin Design Problem in Determining the Optimum Shape of Non-Fourier Spine and Longitudinal Fins”, CMC, Computers, Materials and Continua, (SCI&EI paper), Vol. 5, No. 3, pp. 197–211, 2007. NSC-94-2611-E-006-021

(86) S. Kim, J. H. Moon and C. H. Huang, “An approximate solution of the non-linear fin problem with temperature-dependent thermal conductivity and heat transfer coefficient” Journal of Physics D: Applied Physics, (SCI&EI paper), Vol. 40, pp.

4382–4389, 2007.

(87) C. H. Huang and C. C. Shih, “An Inverse Problem in Estimating Simultaneously the Time-Dependent Applied Force and Moment of an Euler-Bernoulli Beam”, CMES-Computer Modeling in Engineering & Sciences, (SCI&EI paper), Vol. 21, No. 3, pp. 239–254, 2007. NSC-96-2221-E-006-065.

(88) C. H. Huang, J. X. Li and S. Kim, “An Inverse Problem in Estimating the Strength of Contaminant Source for Groundwater Systems”, Applied Mathematical Modelling (SCI&EI paper), Vol. 32, pp. 417–431, 2008. NSC-94-2611-E-006-021.

(89) C. H. Huang, K.Y. Chen and S. Kim, “An Inverse Problem in Estimating the Relaxation Time for Nanoscale Phonon Radiative Transfer Problem”, Int. J. Numerical Methods in Engineering, (SCI&EI paper), Vol. 73, No. 1, pp. 1–25, 2008. NSC-94-2611-E-006-021.

(90) C. H. Huang and C.Y. Lin, “An Iterative Regularization Method in Estimating the Unknown Energy Source by Laser Pulses with a Dual-Phase-Lag Model”, Int. J. Numerical Methods in Engineering (SCI&EI paper), Vol. 76, pp. 108–126, 2008. NSC-94-2611-E-006-021.

(91) C. H. Huang and C.Y. Lin, “Inverse Hyperbolic Conduction Problem in Estimating Two Unknown Surface Heat Fluxes Simultaneously”, AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 22, No. 4, pp. 5238–5246, 2008. NSC-94-2611-E-006-021.

(92) C. H. Huang and M. T. Chaing, “A Transient Three-Dimensional Inverse Geometry Problem in Estimating the Space and Time-Dependent Irregular Boundary Shapes”, Int. J. Heat and Mass Transfer (SCI&EI paper), Vol. 51, No. 21-22, pp. 5238–5246, 2008. NSC-96-2221-E-006-065.

(93) C. H. Huang and C. A. Chen, “The Shape Identification Problem in Estimating the Geometry of A Three-Dimensional Irregular Internal Cavity”, CMES-Computer Modeling in Engineering & Sciences, (SCI&EI paper), Vol. 36, No. 1, pp. 1–21, 2008.

(94) C. H. Huang and M.T. Chaing, “A Three Dimensional Inverse Geometry Problem in Identifying Irregular Boundary Configurations”, International Journal of Thermal Sciences, (SCI&EI paper), Vol. 48, pp. 502–513, 2009. NSC-95-2221-E-006-469.

(95) C. H. Huang, C. C. Shih and Sin Kim, “An Inverse Vibration Problem in Estimating the Spatial and Temporal-Dependent External Forces for Cutting Tools” Applied Mathematical Modelling, (SCI&EI paper), Vol. 33, pp. 2683–2698, 2009. NSC-96-2221-E-006-065.

(96) C. H. Huang, L. Y. Chen and S. Kim, “An Inverse Geometry Design Problem in

Optimizing the Shape of Gas Channel for Proton Exchange Membrane Fuel Cell", J. Power Sources, (SCI&EI paper), Vol. 187, pp. 136–147, 2009. NSC-97-2221-E-006-262-MY3.

(97) C. H. Huang and C. A. Chen, "A Three-Dimensional Inverse Geometry Problem in Estimating the Space and Time-Dependent Shape of An Irregular Internal Cavity", Int. J. Heat and Mass Transfer, (SCI&EI paper), Vol. 52, pp. 2079–2091, 2009. NSC-96-2221-E-006-065.

(98) C. H. Huang and J. W. Lin, "Optimal Gas Channel Shape Design for a Serpentine PEMFC---Theoretical and Experimental Studies", J. Electrochemical Society, (SCI&EI paper), Vol. 156, No. 1, pp. B178–B187, 2009. NSC-97-2221-E-006-262-MY3.

(99) C. H. Huang, I. C. Yuan and H. Ay, "An Experimental Study in Determining the Local Heat Transfer Coefficients for the Plate Finned-tube Heat Exchangers", Int. J. Heat and Mass Transfer, (SCI&EI paper), Vol. 52, pp. 4883–4893, 2009. NSC-97-2221-E-006-262-MY3.

(100) C. H. Huang and Y. L. Chung, "An Optimal Fin Design Problem in Estimating the Shapes of Longitudinal and Spine Fully Wet Fins", CMES-Computer Modeling in Engineering & Sciences, (SCI&EI paper), Vol. 44, No. 3, pp.249-279, 2009. NSC-97-2221-E-006-262-MY3.

(101) C. H. Huang and M. T. Chaing, "A Thermal Tomography Problem in Estimating the Unknown Interfacial Enclosure in a Multiple Region Domain with an Internal Cavity", CMES-Computer Modeling in Engineering & Sciences, (SCI&EI paper), Vol. 53, No. 2, pp.153-179, 2009. NSC-96-2221-E-006-332-MY3.

(102) C. H. Huang and C. Y. Liu, "A Three-Dimensional Inverse Geometry Problem in Estimating Simultaneously Two Interfacial Configurations in a Composite Domain", International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 53, pp.48-57, 2010. NSC-97-2221-E-006-262-MY3.

(103) C. H. Huang and W. L. Chang, "An Inverse Problem in Estimating the Volumetric Heat Generation for A Three-Dimensional Encapsulated Chip ", ASME Journal of Electronic Packaging (SCI&EI paper), Vol. 132, pp. 011004-1~9, 2010. NSC-97-2221-E-006-262-MY3.

(104) C. H. Huang and Y. L. Chung, "A Non-linear Fin Design Problem in Estimating the Optimal Shapes of Longitudinal and Spine Fully Wet Fins", Numerical Heat Transfer, Part A (SCI&EI paper), Vol. 57, No. 10, pp. 749–776, 2010. NSC-97-2221-E-262-MY3.

(105) N. M. Muhammad, K. Y. Kim, C. H. Huang and S. Kim, "Groundwater contaminant boundary input flux estimation in atwo-dimensional aquifer", Journal of Industrial and Engineering Chemistry, (SCI&EI paper), Vol. 16, pp. 106–114,

2010.

(106) C. H. Huang, P. Y. Wu and S. Kim, “A Non-Linear Inverse Problem in Estimating the Polymerization Heat Source of Bone Cements by Iterative Regularization Method ”, Inverse Problems, (SCI&EI paper), Vol. 26, No. 6, 065009, 2010. NSC-97-2221-E-006-262-MY3.

(107) C. H. Huang and C. Y. Liu, “Thermal Tomography Problem in Estimating the Unknown Interfacial Surface”, AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 25, No. 1 (Jan – Mar), pp. 68–79, 2011. NSC-97-2221-E-006-262-MY3.

(108) C. H. Huang, J. J. Lu and Herchang Ay, “A Three-Dimensional Heat Sink Module Design Algorithm with Experimental Verification”, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 54, pp. 1482–1492, 2011. NSC-99-2221-E-006-238-MY3.

(109) C. H. Huang and C. T. Wuchiu, “A Shape Design Problem in Determining the Interfacial Surface of Two Bodies Based on the Desired System Heat Flux”, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 54, pp. 2514–2524, 2011. NSC-97-2221-E-006-262-MY3.

(110) C. H. Huang and C. T. Wuchiu, “Optimum Shape Design for Three-Layer Interfacial Surfaces”, AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 25, No. 3, pp. 476–479, July–September 2011. NSC-99-2221-E-006-238-MY3.

(111) C. H. Huang and P. Y. Wu, “An Optimal Control Problem in Estimating the Cooling Condition for a Cemented Hip Replacement System”, Applied Mathematical Modelling, (SCI&EI paper), Vol. 35, pp. 5480-5491, 2011. NSC-96-2221-E-006-332-MY3.

(112) S. Kim, K.Y. Kim and C. H. Huang, “Estimation of Time-Dependent Reaction Coefficient with Extended Kalman Filter Approach”, Journal of Industrial and Engineering Chemistry, (SCI&EI paper), Vol. 18, pp. 349–354, 2012.

(113) C. H. Huang and M. Y. Lee, “An Inverse Problem in Estimating the Reaction Functions and Solute Concentration Simultaneously in A Reversible Process”, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 55, pp. 470–479, 2012. NSC-99-2221-E-006-238-MY3.

(114) C. H. Huang and C. W. Gau, “An Optimal Design for Axial-Flow Fan Blade -- Theoretical and Experimental Studies”, Journal of Mechanical Science and Techonology (SCI&EI paper), Vol. 26, No. 2, pp. 427–436, 2012. NSC-99-2221-E-006-238-MY3.

(115) C. H. Huang and W. L. Chang, “An inverse design method for optimizing design parameters of heat sink modules with encapsulated chip”, Applied Thermal Engineering (SCI&EI paper), Vol. 40, pp. 216–226, 2012. NSC-100-2221-E-006-

011-MY3.

(116) C. H. Huang, Y. F. Chen and Herchang Ay, “An Inverse Problem in Determining the Optimal Position for Piezoelectric Fan with Experimental Verification”, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol.55, pp. 5289–5301, 2012. NSC-100-2221-E-006-011-MY3.

(117) C. H. Huang and M. H. Hung, “An Optimal Design Algorithm for Centrifugal Fan: Theoretical and Experimental Studies“, Journal of Mechanical Science and Techonology (SCI&EI paper), Vol.27, No. 3, pp. 761–773, 2013. NSC-99-2221-E-006-238-MY3.

(118) C. H. Huang and C. H. Wang, “The Design of Uniform Tube Flow Rates for Z-type Compact Parallel Flow Heat Exchangers “, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 57, pp. 608–622, 2013. NSC-100-2221-E-006-011-MY3.

(119) C. H. Huang, M. Y. Lee and S. Kim, “An Inverse Problem in Determining the Acid and Salt Diffusivities Simultaneously for Polymer Solution in A Wet Spinning Process”, Applied Mathematical Modelling (SCI&EI paper), Vol. 37, pp. 1108–1125, 2013. NSC-100-2221-E-006-011-MY3.

(120) C. H. Huang and C. H. Wang, “The Study on the Improvement of System Uniformity Flow Rate for U-type Compact Heat Exchangers “, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 63, pp. 1–8, 2013. NSC-100-2221-E-006-011-MY3.

(121) C. H. Huang, Y. H. Chen and H. Y. Li, “An Impingement Heat Sink Module Design Problem in Determining Optimal Non-Uniform Fin Widths“, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 67, pp. 992–1006, 2013. NSC-99-2221-E-006-238-MY3.

(122) C. H. Huang and Y. H. Chen, “An Optimal Design Problem in Determining Non-Uniform Fin Heights and Widths for an Impingement Heat Sink Module “, Applied Thermal Engineering (SCI&EI paper), Vol. 63, pp. 481–494, 2014. NSC-100-2221-E-006-011-MY3.

(123) C. H. Huang and Yun-Lung Chung, “An Inverse Design Problem of Estimating the Optimal Shape of Annular Fins Adhered to a Bare Tube of an Evaporator “, Numerical Heat Transfer, Part A (SCI&EI paper), Vol. 66, pp. 1195-1217, 2014. NSC-100-2221-E-006-011-MY3.

(124) C. H. Huang and C. T. Lee, “An Inverse Method in Estimating the Base Heat Flux for Irregular Fins “, AIAA, J. Thermophysics and Heat Transfer (SCI&EI paper), Vol. 28, Issue 2, pp. 320–326, 2014. NSC-100-2221-E-006-011-MY3.

(125) C. H. Huang and Y. H. Chen, “An Impingement Heat Sink Module Design Problem in Determining Simultaneously the Optimal Non-Uniform Fin Widths and

Heights “, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 73, pp. 627–633, 2014. NSC-100-2221-E-006-011-MY3.

(126) C. H. Huang and Bo-Yi Li, “A Non-linear Inverse Problem in Estimating the Reaction Rate Function for an Annular-Bed Reactor “, International Journal of Chemical Reactor Engineering (SCI&EI paper), Vol. 12, pp. 271–283, 2014. NSC-100-2221-E-006-011-MY3.

(127) C. H. Huang and Yun-Lung Chung, “The Determination of Optimum Shapes for Fully Wet Annular Fins for Maximum Efficiency “, Applied Thermal Engineering, (SCI&EI paper), Vol. 73, pp. 436–446, 2014. NSC-100-2221-E-006-011-MY3.

(128) C. H. Huang and C. T. Lee, “An Inverse Problem to Estimate Simultaneously Six Internal Heat Fluxes for A Square Combustion Chamber”, International Journal of Thermal Sciences, Vol. 88, pp. 59–76, 2015. (SCI&EI paper).

(129) C. H. Huang and H. M. Hsu, “An Inverse Problem in Determining the Optimal Filler Shape of Composite Materials for Maximum Effective Thermal Conductivity”, International Journal of Heat and Mass Transfer, (SCI&EI paper), Vol. 80, pp. 98–106, 2015. NSC-102-2221-E-006-082-MY3.

(130) C. H. Huang and Bo-Yi Li, “An Inverse Problem in Estimating Simultaneously the Non-linear Reaction Rates for a Fixed-Bed Reactor “, Applied Mathematical Modelling (SCI&EI paper), Vol. 39, pp. 2217–2233, 2015. NSC-100-2221-E-006-011-MY3.

(131) C. H. Huang, Y. C. Liu and H. Ay, “The Design of Optimum Perforation Diameters for Pin Fin Array for Heat Transfer Enhancement“, International Journal of Heat and Mass Transfer, (SCI&EI paper), Vol. 84, pp. 752–765, 2015. NSC-103-2221-E-006-234-MY3.

(132) C. H. Huang and H. M. Hsu, “A Three-Dimensional Shape Design Problem to Determine the Filler Geometry for Optimal System Thermal Conductivity“, International Journal of Thermal Sciences, (SCI&EI paper), Vol. 92, pp. 119–128, 2015. NSC-103-2221-E-006-234-MY3.

(133) C. H. Huang and Y. L. Chung, “An Inverse Problem in Determining the Optimum Shapes for Partially Wet Annular Fins Based on Efficiency Maximization “, International Journal of Heat and Mass Transfer, (SCI&EI paper), Vol. 90, pp. 364–375, 2015. NSC-103-2221-E-006-234-MY3.

(134) C. H. Huang and W. C. Tseng, “An Optimal Volute Spiral Case Design for Centrifugal Fan: Theoretical and Experimental Studies“, International Journal of Mechanics and Materials in Design (SCI&EI paper), Vol. 12, pp. 223–240, 2016. NSC-100-2221-E-006-011-MY3.

(135) C. H. Huang and Guang-Yi Fan, “Determination of Relative Positions and Phase

Angle of Dual Piezoelectric Fans for Maximum Heat Dissipation of Fin Surface “, International Journal of Heat and Mass Transfer, (SCI&EI paper), Vol. 92, pp. 523–538, 2016. MOST-103-2221-E-006-234-MY3.

(136) C. H. Huang, C. H. Wang and S Kim, “A Manifold Design Problem for a Plate-Fin Microdevice to Maximize the Flow Uniformity of System “, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 96, pp. 22–34, 2016. MOST-103-2221-E-006-234-MY3.

(137) C. H. Huang and Y. L. Chung, “A Nonlinear Fin Design Problem in Determining the Optimum Shapes of Fully Wet Annular Fins “, Applied Thermal Engineering, (SCI&EI paper), Vol. 103, pp. 195–204, 2016. NSC-103-2221-E-006-234-MY3.

(138) C. H. Huang and P. C. Chiang, “An Inverse Study to Design the Optimal Shape and Position for Delta Winglet Vortex Generators of Pin-Fin Heat Sinks“, International Journal of Thermal Sciences, (SCI&EI paper), Vol. 109, pp. 374–385, 2016. MOST-103-2221-E-006-234-MY3.

(139) C. H. Huang and Guan-Jie Wang, “A Design Problem to Estimate the Optimal Fin Shape of LED Lighting Heat Sinks “, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 109, pp. 1205–1217, 2017. MOST-105-2221-E-006-179-MY3.

(140) C. H. Huang and T. R. Chang, “Determination of Optimal Inclination Function for External Reflector of Basin Type Still for Maximum Distillate Productivity “, Energy, (SCI&EI paper), Vol. 141, pp. 1728–1736, 2017. MOST-105-2221-E-006-179-MY3.

(141) C. H. Huang and Y. L. Chung, “Optimal Design of Annular Fin Shapes with Temperature-Dependent Properties “, AIAA, J. Thermophysics and Heat Transfer, (SCI&EI paper), Vol. 32, No. 1, January-March, pp. 18–26, 2018. MOST-105-2221-E-006-179-MY3.

(142) C. H. Huang and M. H. Chen, “An Estimation of the Optimum Shape and Perforation Diameters for Pin Fin Arrays “, International Journal of Heat and Mass Transfer (SCI&EI paper), Vol. 131, pp. 72–84, 2019. MOST-106-2221-E-006-115-MY3.

(143) C. H. Huang and Yuan-Yin Li, “Determining the Optimal Geometry for Producing Isotherms on a Boundary Surface“, AIAA, J. Thermophysics and Heat Transfer, (SCI&EI paper), Vol. 33, No. 4, October-December, pp. 1026–1036, 2019. MOST-106-2221-E-006-115-MY3.

(144) C. H. Huang and Yuan-Yin Li, “A Three-Dimensional Shape Design Problem in Determining the Boundary Geometry to Yield Isotherms“, Numerical Heat Transfer, Part A: Applications, (SCI&EI paper), Vol. 76, No. 7, pp. 517–532, 2019. MOST-106-2221-E-006-115-MY3.

(145) C. H. Huang and Po-Wei Tung, “A Shape Design Problem in Determining the Optimal Geometry of Wavy-Shaped Inverted Fins“, Inverse Problems in Science and Engineering, (SCI&EI paper), 2019. MOST-106-2221-E-006-115-MY3. (accepted, in press).

(146) C. H. Huang and Po-Wei Tung, “Numerical and Experimental Studies on an Optimum Fin Design Problem to Determine the Deformed Wavy-Shaped Heat Sinks “, International Journal of Thermal Sciences (SCI&EI paper), 2019. MOST-108-2221-E-006-088-MY3. (revision).

(147) C. H. Huang and Yi-Tsan Chen, “An Inverse Shape Design Problem in Determining the Optimal Snowflake-Shaped Fins “, International Journal of Mechanics and Materials in Design (SCI&EI paper), 2019. MOST-106-2221-E-006-115-MY3. (submitted).