

# Wen-Lih Chen

## List of Publications by Year in descending order

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Version: 2024-02-01

68  
papers

1,209  
citations

361413

20  
h-index

434195

31  
g-index

68  
all docs

68  
docs citations

68  
times ranked

618  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | The application of an innovative integrated Swiss-roll-combustor/Stirling-hot-end component on an unpressurized Stirling engine. <i>Energy Conversion and Management</i> , 2021, 249, 114831.   | 9.2 | 10        |
| 2  | A parametric study on the effects of displacer-cylinder-circumferential-wall thermal conditions on the performance of a $\hat{\Gamma}^3$ -type LTD Stirling engine. <i>International Journal of Ambient Energy</i> , 2020, 41, 19-30. | 2.5 | 0         |
| 3  | Biosyngas-fueled platinum reactor applied in micro combined heat and power system with a thermophotovoltaic array and stirling engine. <i>Energy</i> , 2020, 194, 116862.   | 8.8 | 19        |
| 4  | Development of a compact simple unpressurized Watt-level low-temperature-differential Stirling engine. <i>International Journal of Energy Research</i> , 2020, 44, 12029-12044.   | 4.5 | 2         |
| 5  | Inverse Estimation of Cooling Heat Flux in Spray Cooling of Hot Surface Based on Dual-Phase-Lag Model. <i>International Journal of Computational Methods</i> , 2020, 17, 1950069.   | 1.3 | 0         |
| 6  | Inverse estimation of heat input in laser surface hardening with a dual-phase-lag model. <i>Journal of Laser Applications</i> , 2020, 32, .   | 1.7 | 1         |
| 7  | A CFD study on the performance of a passive ocean plastic collector under rough sea conditions. <i>Ocean Engineering</i> , 2019, 188, 106243.   | 4.3 | 4         |
| 8  | A numerical study on applying slot-grooved displacer cylinder to a $\hat{\Gamma}^3$ -type medium-temperature-differential stirling engine. <i>Energy</i> , 2018, 144, 679-693.  | 8.8 | 8         |
| 9  | Estimation for inner surface geometry of a two-layer-wall furnace with inner wall made of functionally graded materials. <i>International Communications in Heat and Mass Transfer</i> , 2018, 97, 143-150.                           | 5.6 | 7         |
| 10 | Function estimation of laser-induced heat generation in a gas-saturated powder layer heated by a short-pulsed laser. <i>International Communications in Heat and Mass Transfer</i> , 2017, 81, 56-63.                                 | 5.6 | 6         |
| 11 | Inverse estimation of the unknown base heat flux in irregular fins made of functionally graded materials. <i>International Communications in Heat and Mass Transfer</i> , 2017, 87, 157-163.  | 5.6 | 19        |
| 12 | An inverse problem in estimating the laser irradiance and thermal damage in laser-irradiated biological tissue with a dual-phase-lag model. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 446-456.   | 1.6 | 11        |
| 13 | A study on the effects of geometric parameters in a low-temperature-differential $\hat{\Gamma}^3$ -type Stirling engine using CFD. <i>International Journal of Heat and Mass Transfer</i> , 2017, 107, 1002-1013.                     | 4.8 | 16        |
| 14 | Numerical analysis of dual-phase-lag heat transfer for a moving finite medium subjected to laser heat source. <i>Applied Mathematical Modelling</i> , 2016, 40, 4700-4711.  | 4.2 | 9         |
| 15 | Numerical study of dual-phase-lag heat conduction in a thermal barrier coating with a hybrid method. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2016, 38, 287-296.                              | 1.6 | 3         |
| 16 | A numerical study on the effects of moving regenerator to the performance of a $\hat{\Gamma}^2$ -type Stirling engine. <i>International Journal of Heat and Mass Transfer</i> , 2015, 83, 499-508.                                    | 4.8 | 32        |
| 17 | A CFD parametric study on the performance of a low-temperature-differential $\hat{\Gamma}^3$ -type Stirling engine. <i>Energy Conversion and Management</i> , 2015, 106, 635-643.   | 9.2 | 32        |
| 18 | Estimation of surface heat flux and temperature distributions in a multilayer tissue based on the hyperbolic model of heat conduction. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 1525-1534.      | 1.6 | 20        |

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|----|--|------|-----------|
| 19 | Estimation of energy absorption rate and temperature distributions in short-pulse laser heating of metals with a dual-phase-lag model. <i>Applied Thermal Engineering</i> , 2014, 65, 352-360.   | 6.0  | 7         |
| 20 | An inverse hyperbolic heat conduction problem in estimating base heat flux of two-dimensional cylindrical pin fins. <i>International Communications in Heat and Mass Transfer</i> , 2014, 52, 90-96.   | 5.6  | 24        |
| 21 | An experimental study on the performance of the moving regenerator for a $\hat{\Gamma}^3$ -type twin power piston Stirling engine. <i>Energy Conversion and Management</i> , 2014, 77, 118-128.  | 9.2  | 48        |
| 22 | Simultaneous Estimation of Boundary Heat Flux and Convective Heat Transfer Coefficient of a Curved Plate Subjected to a Slot Liquid Jet Impingement Cooling. <i>Numerical Heat Transfer; Part A: Applications</i> , 2014, 66, 252-270.               | 2.1  | 8         |
| 23 | A computational fluid dynamics study on the heat transfer characteristics of the working cycle of a $\hat{\Gamma}^2$ -type Stirling engine. <i>Energy Conversion and Management</i> , 2014, 88, 177-188.   | 9.2  | 40        |
| 24 | A computational fluid dynamics study on the heat transfer characteristics of the working cycle of a low-temperature-differential $\hat{\Gamma}^3$ -type Stirling engine. <i>International Journal of Heat and Mass Transfer</i> , 2014, 75, 145-155. | 4.8  | 44        |
| 25 | An inverse hyperbolic heat conduction problem in estimating surface heat flux of a living skin tissue. <i>Applied Mathematical Modelling</i> , 2013, 37, 2630-2643.  | 4.2  | 56        |
| 26 | Inverse hyperbolic thermoelastic analysis of a functionally graded hollow circular cylinder in estimating surface heat flux and thermal stresses. <i>International Journal of Heat and Mass Transfer</i> , 2013, 60, 125-133.                        | 4.8  | 26        |
| 27 | An inverse problem in estimating the space-dependent thermal conductivity of a functionally graded hollow cylinder. <i>Composites Part B: Engineering</i> , 2013, 50, 112-119.   | 12.0 | 25        |
| 28 | Analysis of dual-phase-lag heat conduction in short-pulse laser heating of metals with a hybrid method. <i>Applied Thermal Engineering</i> , 2013, 52, 275-283.  | 6.0  | 26        |
| 29 | A numerical analysis on the performance of a pressurized twin power piston gamma-type Stirling engine. <i>Energy Conversion and Management</i> , 2012, 62, 84-92.  | 9.2  | 28        |
| 30 | Non-Fourier Thermoelastic Analysis of an Annular Fin with Variable Convection Heat Transfer Coefficient. <i>International Journal of Thermophysics</i> , 2012, 33, 1068-1081.  | 2.1  | 4         |
| 31 | Estimation of heat flux on the surface of an initially hot cylinder cooled by a laminar confined impinging jet. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 597-606.  | 4.8  | 7         |
| 32 | Inverse heat transfer analysis of a functionally graded fin to estimate time-dependent base heat flux and temperature distributions. <i>Energy Conversion and Management</i> , 2012, 57, 1-7.  | 9.2  | 40        |
| 33 | A Nonlinear Inverse Problem in Estimating the Heat Generation in Rotary Friction Welding. <i>Numerical Heat Transfer; Part A: Applications</i> , 2011, 59, 130-149.  | 2.1  | 34        |
| 34 | A nonlinear inverse problem in estimating the heat flux of the disc in a disc brake system. <i>Applied Thermal Engineering</i> , 2011, 31, 2439-2448.  | 6.0  | 81        |
| 35 | Inverse estimation for unknown fouling geometry on inner wall of forced-convection pipe. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2011, 32, 55-68.   | 3.6  | 4         |
| 36 | Inverse prediction of frictional heat flux and temperature in sliding contact with a protective strip by iterative regularization method. <i>Applied Mathematical Modelling</i> , 2011, 35, 2874-2886.   | 4.2  | 12        |

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|----|---|-----|-----------|
| 37 | The inaccuracy of heat transfer characteristics for non-insulated and insulated spherical containers neglecting the influence of heat radiation. <i>Energy Conversion and Management</i> , 2011, 52, 1612-1621.                 | 9.2 | 8         |
| 38 | Estimation of thermal contact resistance and temperature distributions in the pad/disc tribosystem. <i>International Communications in Heat and Mass Transfer</i> , 2011, 38, 298-303.  | 5.6 | 20        |
| 39 | Calculation of jet's inlet temperature for plate temperature control in an impinging jet cooling problem. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 5008-5016.   | 4.8 | 8         |
| 40 | Simultaneous estimation of heat-transfer rate and coolant fluid velocity in a transpiration cooling process. <i>International Journal of Thermal Sciences</i> , 2010, 49, 1407-1416.  | 4.9 | 6         |
| 41 | The critical heat transfer characteristics of an insulated oval duct. <i>Energy Conversion and Management</i> , 2010, 51, 1442-1448.  | 9.2 | 3         |
| 42 | Inverse problem of estimating the heat flux at the roller/workpiece interface during a rolling process. <i>Applied Thermal Engineering</i> , 2010, 30, 1247-1254.   | 6.0 | 38        |
| 43 | Inverse estimation for unknown fouling-layer profiles with arbitrary geometries on the inner wall of a forced-convection duct. <i>International Journal of Thermal Sciences</i> , 2010, 49, 86-98.                              | 4.9 | 9         |
| 44 | Inverse estimation for the unknown frost geometry on the external wall of a forced-convection pipe. <i>Energy Conversion and Management</i> , 2009, 50, 1457-1464.  | 9.2 | 8         |
| 45 | An iterative regularization method in estimating the transient heat-transfer rate on the surface of the insulation layer of a double circular pipe. <i>Energy Conversion and Management</i> , 2009, 50, 3096-3103.              | 9.2 | 4         |
| 46 | An iterative regularization method in simultaneously estimating the inlet temperature and heat-transfer rate in a forced-convection pipe. <i>International Journal of Heat and Mass Transfer</i> , 2009, 52, 1928-1937.         | 4.8 | 18        |
| 47 | Estimation of heat generation at the interface of cylindrical bars during friction process. <i>Applied Thermal Engineering</i> , 2009, 29, 351-357.   | 6.0 | 27        |
| 48 | Three-Dimensional Pipe Fouling Layer Estimation by Using Conjugate Gradient Inverse Method. <i>Numerical Heat Transfer; Part A: Applications</i> , 2009, 55, 845-865.   | 2.1 | 15        |
| 49 | On the inverse heat convection problem of the flow over a cascade of rectangular blades. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 4184-4194.  | 4.8 | 20        |
| 50 | Incorrectness of conventional one-dimensional parallel thermal resistance circuit model for two-dimensional circular composite pipes. <i>Energy Conversion and Management</i> , 2008, 49, 1237-1247.                            | 9.2 | 1         |
| 51 | Numerical study on heat transfer characteristics of double tube heat exchangers with alternating horizontal or vertical oval cross section pipes as inner tubes. <i>Energy Conversion and Management</i> , 2008, 49, 1574-1583. | 9.2 | 38        |
| 52 | Reliable one-dimensional approximate solution of insulated oval duct. <i>Energy Conversion and Management</i> , 2008, 49, 2214-2224.  | 9.2 | 2         |
| 53 | Inverse problem of estimating transient heat transfer rate on external wall of forced convection pipe. <i>Energy Conversion and Management</i> , 2008, 49, 2117-2123.   | 9.2 | 18        |
| 54 | The inaccuracy of conventional one-dimensional parallel thermal resistance circuit model for two-dimensional composite walls. <i>Energy Conversion and Management</i> , 2008, 49, 2554-2562.                                    | 9.2 | 3         |

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|----|--|-----|-----------|
| 55 | Estimation of the Transient Heat Transfer Rate at the Boundary of an Electronic Chip Packaging. Numerical Heat Transfer; Part A: Applications, 2008, 54, 945-961.  | 2.1 | 14        |
| 56 | An inverse problem of estimating the heat source in tapered optical fibers for scanning near-field optical microscopy. Ultramicroscopy, 2007, 107, 656-662.  | 1.9 | 18        |
| 57 | Estimating the absorptivity in laser processing by inverse methodology. Applied Mathematics and Computation, 2007, 190, 712-721.   | 2.2 | 13        |
| 58 | Reliable one-dimensional CPWTR models for two-dimensional insulated polygonal ducts. International Journal of Refrigeration, 2007, 30, 254-266.  | 3.4 | 4         |
| 59 | A numerical study on the heat-transfer characteristics of an array of alternating horizontal or vertical oval cross-section pipes placed in a cross stream. International Journal of Refrigeration, 2007, 30, 454-463. | 3.4 | 9         |
| 60 | A reliable analytical method applied to heat transfer problems associated with insulated cylindrical tanks. Energy Conversion and Management, 2007, 48, 679-687.   | 9.2 | 6         |
| 61 | Inverse problem in determining convection heat transfer coefficient of an annular fin. Energy Conversion and Management, 2007, 48, 1081-1088.  | 9.2 | 77        |
| 62 | An inverse problem in determining the heat transfer rate around two in line cylinders placed in a cross stream. Energy Conversion and Management, 2007, 48, 1996-2005.   | 9.2 | 10        |
| 63 | Reliable one dimensional 46-CPWTR model applied to two dimensional heat transfer problem of insulated triangular duct. Energy Conversion and Management, 2007, 48, 3135-3145.  | 9.2 | 3         |
| 64 | A reliable one-dimensional method applied to heat-transfer problems associated with insulated rectangular tanks in refrigeration systems. International Journal of Refrigeration, 2006, 29, 485-494.                   | 3.4 | 7         |
| 65 | A parametric study on the laminar flow in an alternating horizontal or vertical oval cross-section pipe with computational fluid dynamics. International Journal of Heat and Mass Transfer, 2006, 49, 287-296.         | 4.8 | 20        |
| 66 | Complete heat transfer solutions of an insulated regular polyhedron by using an RPSWT model. Energy Conversion and Management, 2005, 46, 2232-2257.  | 9.2 | 10        |
| 67 | A numerical study on the flow over a novel tube for heat-transfer enhancement with a linear Eddy-viscosity model. International Journal of Heat and Mass Transfer, 2004, 47, 3431-3439.                                | 4.8 | 27        |
| 68 | Non-linear eddy-viscosity modelling of separated flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 1997, 35, 723-748.   | 1.7 | 32        |