

QIRT 1998 - List of Papers

[Lodz, Poland, 7-10 sept. 1998]

Invited Papers

1. Thermal effects in solid bodies under mechanical loading
Ficker E.
2. Quantitative infrared thermography in thermofluidynamics
Cardone G.
3. Application of IR thermography for microelectronic design and modeling
De Mey G.

Non Destructive Evaluation

4. Non destructive evaluation by infrared thermography to detect the defects in material
Najar F., Sicard J., Duval R.
5. High-speed pulsed thermography for characterization of thin metallic coatings
Netzelman U., Walle G., Vetterlein T., Meyendorf N.
6. Single-sided interferometric EMIR method for NDE of radar absorbing structures
Levesque P., Balageas D.L.
7. Infrared thermographic detection and characterisation of impact damage in carbon fiber plastics: round robin test result
Almond D., Busse G., Grinzato E., Krapez J-C., Maldague X., Vavilov V., Peng W.
8. Mathematical model for simulation of detects under material surface applied to thermographic measurement
Boras I., Svaic S., Galovic A
9. Detection Of Vertical Surface Cracks In Unidirectional Carbon Fibre Composites With An Infrared Line-Scanning Technique
Varis J., Lehtiniemi R., Rantala J.
10. NDE of frescoes by Infrared Thermography and lateral heating
Gninzato E., Bison P.O., Bressan C., Mazzoldi A.
11. The detection and measurement of impact damage in thick carbon fibre reinforced laminates by transient thermography
Almond D. P., Ball R. J., Hooker J. D.
12. Thermal image analysis on internal and surface flaws of mnterials by means of infrared radiometer
Okamoto Y., Kamoi A., Ishii T.
13. Thermography use for cellular structures defects discovery

Storozhenko V.A., Tikhij V.G., Meshkov S.N., Melnik S.I., Judin A.A.

14. Thermovision information processing for definition of local anomalies of internal structure of object
Storozhenko V.A., Melnik S.I., Oryol R.P., Krivoruchko V.I.
15. Thermovision thermography and holographic interferometry at n-In-As hall sensor's defectoscopy and diagnostic
Pjatnitskaja G., Arlov B., Gusakova S., Segen A.
16. Thermal Nondestructive Evaluation of Copper Products Using an Infrared Line Scanning Technique
Varis J., Rantala J.
17. Modelling of temperature fields in objects with nonuniformity on the basis of representation about isothermal waves
Melnik S.I., Storozhenko V.A., Maslowa V., Bunduryan O.
18. A critical analysis and possible modifications of two analytical models for defect sizing using Video Pulse Thermography
Cernuschi F., Ludwig N., Russo A., Teruzzi P
19. NDE of CFRP Composites by transient thermography
Peng Wen, Almond D.
20. Moisture detection through dynamic measurement of temperature
Milazzo M., Ludwig N., Poldi G.
21. The rotating cement kiln 3D computer model orientated toward solving thermal nondestructive testing problems
Torgunakov V.G., Sukhanov M.S., Vavilov V.P., Yamanaev N.M.

Thermoelastic Effects

22. Recent development in thermoelastic stress analysis
Jecic S., Goja S.
23. Thermoelastic and thermoplastic effects during loading and unloading of an austenitic steel
Pieczyska E.A., Gadaj S.P., Nowacki W.K.
24. Temperature evolution during simple shear test of steel
Gadaj S.P., Nowacki W.K., Pieczyska E.A.
25. Inverse heat conduction calculation by means of harmonic response functions applied to quantitative thermographic stress analysis
Offermann S., Bissieux C., Beaudoin J.L.
26. Advantages of thermographic approach of fatigue testing
Kurilenko G.

27. Stress analysis by means photothermal infrared thermography
Pron H., Henry J.F., Offerman S., Bissieux C., Beaudoin J.L.
28. Investigation of metal deformation using thermography
Oliferuk W.
29. Thermovision method in stress analysis of textile materials
Michalak M., Mikolajczyk Z., Wiecek B.
30. Thermal imaging of temperature changes in samples tensioned by testing machine
Dabrowski M., Galin G., Wiecek B.

Thermal Waves (Lock-in Thermography)

31. Compared performances of some algorithms for lock-in thermography
Krapez J.-C.
32. Progress in ultrasonic lock-in thermography
Salerno A., Dillenz A., Wu D., Rantala J., Busse G.
33. Detection of loosening bolts in airplane components using lock-in thermography
Zweschper Th., Wu D., Busse G.
34. Pulsed phase thermography of aluminium laminates: neural network investigation
Largouet Y., Maldague X.
35. Lock-in thermography inspection of plastic pipes under modulated internal pressure
Salerno A., Maier T., Wu D., Busse G.

Applications

36. Broadening IR applications through using spectral filters
Pas G.
37. True temperature measurement of electronics through infrared transparent materials
Lehtiniemi R., Rantala J.
38. Amplitude sensitive modulation-thermography the new way of moisture measurement in building materials
Buscher K.A., Wiggenhauser H., Wild W.
39. Quantitative infrared thermography, noise characterization and inverse conduction problems
Ilyinsky A.
40. Experimental characterization of heat transfers for a vortex-wall interaction
Reulet P., Marchand M., Millan P.
41. Microwave holography using infrared thermograms for measuring antenna patterns

Norgard J., Stubenrauch C., McReynolds K., Will J., Seifert M.

42. Quantitative infrared thermography in fire tests
Heinrich H., Dahiem K-H.
43. An FT-IR based instrument for measuring infrared diffuse reflectance
Francou L., Herve P.
44. Some investigations in restauration using IR thermography
Vukovic J.
45. Surface and volume effects in thermal signatures of buried mines: experiment and modeling
Pregowski P., Swiderski W., Walczak R. T.
46. IR thermography application in studying phenomena in warm extrusion tooling
Kocanda A., Czyzewski P., Kita K., Pregowski P.
47. Thermophysics-based JR Analysis of HV/MV equipment - statistical defect localization
Florkowski M., Korendo Z.
48. Application of infra-red filtering in electronic technology
Benko I.
49. IR microscope measurement of the plasma spreading in thyristor
Wiecek B., Michalski A.
50. IR camera and pyrometer used for woodworking process control
Kastek M., Madura H., Polakowski H.
51. Modeling of infrared imaging for 3-D objects
Dulski R., Sikorski Z., Niedziela T.
52. Method for combustion testing of intermediate fuel oils
Ghia V.V.
53. Thermovision diagnosis of glass furnaces
Osiadly J.
54. The estimation of heat conductivity of building walls by using thermal images
Jaworski J.
55. Analysis of physical properties of insulating materials used in architecture with application of thermography
Lubecki A., Wojcik R.
56. Analysis of temperatures and humidity in cows sheds
Lubecki A., Iwanczuk-Czernik K.
57. Determination of accuracy of tread in car tyres with application of thermography
Lubecki A.

58. Methodology of thermovision investigations in the machine tools
Poloszyk S., Rozanski L.

Thermofluid Dynamics

59. Detailed investigation of aerothermal behavior of confined impinging jet
Buchlin J-M., Laperches M.
60. Heat transfer measurements on a rotating disk with a centered impinging jet
Astarita T., Cardone G., Carlomagno G. M.
61. Heat transfer measurements in a rotating two-pass channel by infrared thermography
Marino L., Astarita T., Cardone G., Carlomagno G. M.
62. Thermal field thermography for thermoplastic polymers film blowing
Cuccurullo G., Berardi P.G., Di Maio L.
63. Estimations of the heat exchange coefficient of a two-temperature model by infrared thermography:
application to stratified composites and smooth rectangular channels
Poncet E., Bereziat D., Grangeot G., Batsale J.C.
64. The investigation of actual evapotranspiration with the use of thermography
Baranowski P., Mazurek W., Walczak R.T.
65. Convective heat transfer to a jet in cross-flow
Cardone G., Meola C., Carlomagno G. M.
66. Modelling of conjugate heat transfer in microelectronics with variable fluid properties
Wiecek B.

Systems and Components

67. Uncooled IRFPA development review
Tissot J.-L.
68. Evaluation of infrared focal plane array detectors
Gross W., Hierl Th., Schulz M.
69. Some problems in applications of integrated radiation thermopile sensor
Marincic A., Tmusic R.
70. Optimization of the photothermal camera for cracks detection
Krapez J.-C., Legrandjacques L., Lepoutre F., Balageas D.
71. Spatially resolved measurement of the spectral emissivity of high-temperature

components by multi-channel thermography

Walle G., Meyendorf N., Vetterlein T., Netzelman U., Hofmann G., Nagel

72. Multichannel thermography systems for real-time and transient thermal process application
Zwolenik S., Wiecek B.
73. Directional emissivity correction by 3-D image reconstruction with automatic matching
Stein R., Sawicki P., Wiecek B.
74. Infrared pyrometer for temperature measurement of objects, emissivity of which depends on wavelength and time
Bielecki Z., Chrzanowski K., Piatkowski T., Szulim M.
75. Calibration of the thermal infrared imagery of the bare soils using digital matrix thermometer (DMT)
Mularz S., Hejmanowska B.
76. Black silicon as secondary standard of the black body
Gotszalk T.P., Rangelow I., Szeloch R.F.
77. Fast scanning pyrometer for temperature measurement of car wheels
Kastek M., Madura H., Polakowski H., Sulej S.
78. A comparative study of advanced frequency - domain coding techniques in compression of infrared line - scan images
Milovanovic D., Wiecek B., Marincic A., Petrovic G., Barbaric Z.

Medicine

79. Reliability of thermal imaging in rheumatology and neuromuscular disorders
K. Ammer
80. Future of thermography. Clinical implications
Govindan S.
81. BTHERM for infra-red medical imaging
Ring F., Plassmann P.
82. Infrared thermography for control of hemodialysis shunts
Maca Th., Atteneder M., Horl W. H., Katzenschlager R., Muller-Knespel E., Koppensteiner T., Schmaldienst S., Ugurluoglu A., Willfort A., Ehringer H.
83. Application of thermography for evaluation of the allergen provocation
Buezylo K., Wiecek B., Chwala C.
84. The appliance of the thermovision computerized system for the valuation of the corrective exercises efficiency in the juvenile idiopathic scoliosis treatment
Rackowski J.W., Wegrewicz A., Pala W.

85. Regulation Thermography — a survey
Berz R.
86. Thermal imaging in the investigation of deep venous thrombosis
Harding J.R.
87. Non-invasive imaging in the investigation of deep vein thrombosis in pregnancy
Harding J.R., Wright A.M.
88. Is DYT excluded by normal thermal imaging? — An outcome study of 700 cases
Harding J.R., Barnes K.
89. New infra-red histographic investigation of the effects of beta-irradiation in medical field
Benko I., Koteles G.J., Nemeth G.
90. The figurative recognition of soft tissue injuries with infrared thermography
Zielinski M., Milewski S., Ksiazek A.
91. Thermography in evaluation of circulatory disturbances of periodontium
Deboa D., Trombska M., Banach J.
92. Thermal and radiological image processing in pneumonia monitoring
Jung A., Zuber J.
93. Infra-red imaging in diabetic foot ulceration
Harding J.R., Wertheim D.F., Williams R.J., Melhuish J.M., Harding K.G.

Late Abstracts

94. Recognition of defects and definition of their characteristics under automatized, thermal non destructive sheet rolled metal control
Budadin O.N., Panin V.F., Abramova E. V., Zadernyuk V.B.