



INFRARED PHYSICS & TECHNOLOGY

An International Research Journal

AUTHOR INFORMATION PACK

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ISSN: 1350-4495

DESCRIPTION

The Journal covers the entire field of **infrared physics** and **technology**: theory, experiment, application, devices and instrumentation.

Its core topics can be summarized as the generation, propagation and detection, of **infrared radiation**; the associated optics, materials and devices; and its use in all fields of science, industry, engineering and medicine.

Infrared techniques occur in many different fields, notably spectroscopy and interferometry; material characterization and processing; atmospheric physics, astronomy and space research. Scientific aspects include lasers, quantum optics, quantum electronics, image processing and semiconductor physics. Some important applications are medical diagnostics and treatment, industrial inspection and environmental monitoring.

A fuller though not exhaustive list of topics would include:

- Astronomy, Astrophysics and Space Research
- Atmospheric transmission, turbulence and scattering
- Biomedical and Medical applications
- Cultural heritage
- Environmental applications: pollution and monitoring
- Detectors: quantum and thermal
- Image processing
- Industrial applications
- Infrared lasers including free electron lasers
- Material properties, processing and characterization.
- Nondestructive testing, active and passive.
- Optical elements: lenses, polarizers, filters, mirrors, fibres, etc.
- Radiometry: techniques, calibration, standards and instrumentation.
- Remote sensing and range-finding
- Solid-state physics
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- Synchrotron radiation in the infrared

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Their target audience should be those **working in the field of Infrared Physics and Technology**. Papers using infrared methods, such as FTIR spectroscopy or thermography, in an essentially routine way to advance some other field, and of interest to other readerships, and generally not suited to this Journal.

The Journal does include within its scope genuinely new applications of established infrared methods.

The Journal only publishes papers which are purely based on computer modelling without support from experimental results in exceptional circumstances when there is a clear reason to do so.

These might, for example, include comparative studies of designs for large pieces of equipment such as satellites, FELs etc.

Papers on advances in modelling techniques, appropriately validated, are welcome.

AUDIENCE

Those involved in the theory, techniques and instrumentation of infrared physics and engineering.

IMPACT FACTOR

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Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result'

List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

Examples:

Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59. <https://doi.org/10.1016/j.Sc.2010.00372>.

Reference to a journal publication with an article number:

[2] Van der Geer, J., Hanraads, J.A.J., Lupton, R.A., 2018. The art of writing a scientific article. *Heliyon.* 19, e00205. <https://doi.org/10.1016/j.heliyon.2018.e00205>.

Reference to a book:

[3] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[4] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

Reference to a dataset:

[dataset] [6] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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