Package 'ROI.models.globalOptTests'

January 7, 2025

Type Package

Title 'ROI' Optimization Problems Based on 'globalOptTests'

Version 1.1-2

Description A collection of non-linear optimization problems with box bounds
transformed into 'ROI' optimization problems.
This package provides a wrapper around the 'globalOptTests'
which provides a collection of global optimization problems.
More information can be found in the 'README' file.

Imports ROI (>= 0.3-0), globalOptTests

Suggests Rglpk (>= 0.6-2)

License GPL-3

RoxygenNote 7.2.3

NeedsCompilation no

Author Florian Schwendinger [aut, cre]

Maintainer Florian Schwendinger <FlorianSchwendinger@gmx.at>

Repository CRAN

Date/Publication 2025-01-07 10:40:02 UTC

Contents

---

globopt *Access* globalOptTests

Description

Get one or more optimization problems, meta information or a listing of the available globalOptTests
problems.

Usage

```
globopt(x = c("all", "metainfo", "Ackleys", "AluffiPentini",
              "BeckerLago", "Bohachevsky1", "Bohachevsky2",
              "Branin", "Camel3", "Camel6", "CosMix2", "CosMix4",
              "DekkersAarts", "Easom", "EMichalewicz", "Expo",
              "GoldPrice", "Griewank", "Gulf",
              "Hosaki", "Kowalik", "LM1", "LM2n10",
              "LM2n5", "McCormic", "MeyerRoth", "MieleCantrell",
              "Modlangerman", "ModRosenbrock", "MultiGauss",
              "Neumaier2", "Neumaier3", "Paviani", "Periodic",
              "PowellQ", "PriceTransistor", "Rastrigin",
              "Rosenbrock", "Salomon", "Schaffer1", "Schaffer2",
              "Schubert", "Schwefel", "Shekel10", "Shekel5",
              "Shekel7", "Shekelfox5", "Wood", "Zeldasine10",
              "Zeldasine20"))
```

Arguments

x   a character giving the names of the optimization problems to be returned, if x is
                    "all" all available problems are returned, if x is the name of a single problem
                    the given problem is returned. If x is missing a listing of all available problems
                    is returned. If x is "metainfo" the meta information about the problems is
                    returned.

Examples

```
## list all available MIPLIB-2010 problems
globopt()
## get all miplib problems
globopt("all")
## get a single problem
globopt("MieleCantrell")
## get the meta information
globopt("metainfo")
```

Index