pyramids Documentation

Release

Author

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pyramids package

Subpackages

pyramids.io package

Submodules

pyramids.io.fdf module

```
Created on Fri July 22 18:16:20 2016 The collection of the useful methods used in the TDAP results analysis
```

```
class pyramids.io.fdf.tdapOptions (inputFile='input.fdf')
    Bases: object
    getFloat (label, default)
    getFloatWithUnit (label, default)
    getInteger (label, default)
    getLogical (label, default)
    getString (label, default)
    output ()
    readFdf (inputFile='input.fdf')
```

pyramids.io.output module

```
Created on Wed Jul 27 00:10:57 2016

@author: clian
pyramids.io.output.writeSiesta(filename, atoms)
```

pyramids.io.result module

```
Created on Mon Jul 25 20:28:55 2016 The collection of the useful methods used in the TDAP results analysis
```

```
pyramids.io.result.getBands(bandType='e')
```

return the bands read from systemLabel.bands as the dimension numKpoint x numBand x numSpin returns: X, Ek, xticks, xticklabels

```
pyramids.io.result.getBerry(step='')
     return the Eigenvalues read from systemLabel.EIG
pyramids.io.result.getDOS (filename='siesta.dos')
     return the dos read from filename as the dimension numEnergyPoint returns: energy, up, down, total
pyramids.io.result.getDipole()
pyramids.io.result.getEField()
pyramids.io.result.getEIGSteps()
pyramids.io.result.getEigAndPar(timeSteps=None, forceReread=False)
     return the Times, Eigvalues and Partitions at selected timeSteps write two files EIG and PAR
pyramids.io.result.getEnergyTemperaturePressure()
     return the Temperature, KS Energy and Total Energy as the dimension of Nstep read from systemLabel.MDE
     returns the Temperature, KS Energy, Total Energy, Volume, Pressure
pyramids.io.result.getExcitedElectrons (selectK=None)
pyramids.io.result.getFermiEnergy()
     return the Fermi Energy read from systemLabel.EIG if failed, return 0 rather than raise an exception
pyramids.io.result.getHomo()
     return the index of the highest occupied molecular orbital (HOMO)
pyramids.io.result.getTrajactory()
pyramids.io.result.loadSaved(filename)
pyramids.io.result.readEigFile (filename='')
     return the Eigenvalues read from systemLabel.EIG
Module contents
pyramids.plot package
```

Submodules

pyramids.plot.PlotUtility module

pyramids.plot.setting module

```
Created on Fri Jan 22 18:16:20 2016 The collection of the useful methods used in the TDAP results analysis
pyramids.plot.setting.getColors(colorList, cmap='jet')
pyramids.plot.setting.getPropertyFromPosition(index=None,
                                                                            xlabel='',
                                                                                         ylabel='',
                                                             title="', xticks=None, yticks=None, xtick-
                                                             labels=None, yticklabels=None, xlim-
                                                             its=None, ylimits=None, hline=None,
                                                             vline=None)
     a utility function to set the property of the figure axe
pyramids.plot.setting.setProperty(ax, **kargs)
     a utility function to set the property of the figure axe
```

Module contents

pyramids.process package

Submodules

pyramids.process.struct module

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