

README File

Contact/Corresponding Author: Christopher Muhlstein (Christopher.muhlstein@mse.gatech.edu)

Description

Data were collected in laboratories at the Georgia Institute of Technology (Atlanta, GA). All acronyms and variables are identical to those defined in the manuscript. Each column of data contains the associated name and units. The uncertainty and precision, experimental conditions, and methods of the data collection and analysis are defined in the manuscript. Software, standards, and calibrations are also defined in the manuscript.

Time period during which data were collected – 20170101 to 20200201.

Format of data files- Excel (.xlsx) and comma separated variable (.csv) spreadsheets

File Information –

This archive contains 9 files that are directly linked to the figure numbers in the manuscript. There are two file formats: one is a single file that contains all of the data sets shown, and the second is a group of individual files (one for each figure). The single file is a Microsoft Excel spreadsheet (.xlsx format), and the individual (identical to the single file) data sets are in a comma separated variable (CSV) format.

Datasets-Na-Palusiewicz-Muhlstein2020.CSV- single file with 8 spreadsheets corresponding to Fig. 1, 5, 6, 7 and Supplementary Figs. 1, 2, 3, and 4. The description of the individual sheets are shown for the individual files below.

Datasets-Na-Palusiewicz-Muhlstein2020-Fig1.CSV- analyzed stress-strain data

Datasets-Na-Palusiewicz-Muhlstein2020-Fig5.CSV- analyzed stress-life data

Datasets-Na-Palusiewicz-Muhlstein2020-Fig6.CSV- raw crack length as a function of accumulated cycles data

Datasets-Na-Palusiewicz-Muhlstein2020-Fig7.CSV- raw crack length as a function of accumulated cycles data

Datasets-Na-Palusiewicz-Muhlstein2020-SuppFig1.CSV- analyzed fatigue and creep-fatigue crack growth rate data

Datasets-Na-Palusiewicz-Muhlstein2020-SuppFig2.CSV- analyzed crack length as a function of threshold level data

Datasets-Na-Palusiewicz-Muhlstein2020-SuppFig3.CSV- raw crack length as a function of accumulated cycles data

Datasets-Na-Palusiewicz-Muhlstein2020-SuppFig4.CSV- analyzed fatigue crack growth rate as a function of test (max applied force) data

Date dataset was last modified: 20200306

