test_Barin

March 9, 2022

```python
[1]: import torch
     from torch.utils.data import DataLoader

     from thermoclassifier.dataset.test_data import TestData
     from thermoclassifier.elements.net import ElementClassifier
```

```python
[2]: seq_len = 5
     td = TestData()
     data = td(r'C:\Users\danie\Documents\Montanuni\Masterarbeit\4␣
      ↪Daten\Barin\Excel', 'barin', seq_len, (200, 2000))

     test_loader = DataLoader(data, batch_size=1, shuffle=True)
```

```python
[3]: def test(net, test_loader):
         correct = 0
         incorrect = 0

         for d in test_loader:
             inp = d[:, :, :-1]
             inp[:, :, 0] /= 1000
             predictions = net(inp.float())
             targets = d[:, :, -1][:, 0].long()

             correct += (predictions.argmax(dim=-1) == targets).sum().item()
             incorrect += len(targets) - (predictions.argmax(dim=-1) == targets).
      ↪sum().item()

         accuracy = correct/(correct + incorrect)
         print('Test accuracy: ', accuracy)

         return accuracy
```

```python
[18]: net = torch.load(r'C:\Users\danie\Documents\Montanuni\Masterarbeit\5␣
      ↪Programmcodes\packages\thermoclassifier\thermoclassifier\elements\models\ElementClassifier_
      ↪pth')
```

```python
[19]: test(net, test_loader)
```

```
Test accuracy:  0.6204379562043796
```

[19]: 0.6204379562043796

[ ]: