



How to install Excel XPS macro on macOS Excel 2016



<https://youtu.be/geoulV1kGx8>

hideki

Ver. 8.42

Ed 1st. 9 Jun. 2017 for Ver. 8.28

Rev. 7 Jun. 2019

Installation of macro on macOS

- The process is the same as that in Windows version except making the database folder.
 - Personal macro workbook
 - Solver add-in and reference in VBE
 - Shortcut key for cmd + opt + “e”
 - Database folder in working space “MyExcelFolder”

The code does not work perfectly yet on macOS.



Sign in



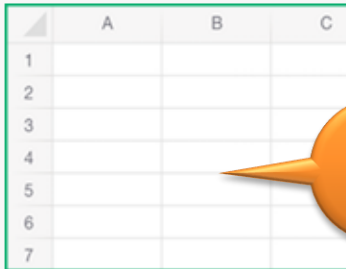
New



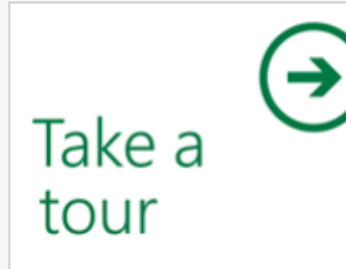
Recent



Open



Blank Workbook



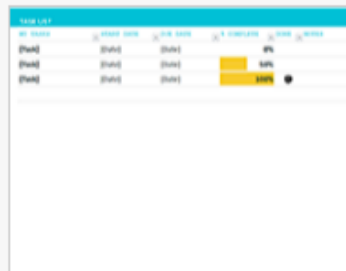
Welcome to Excel



Make a List



Total a List



Track My Tasks

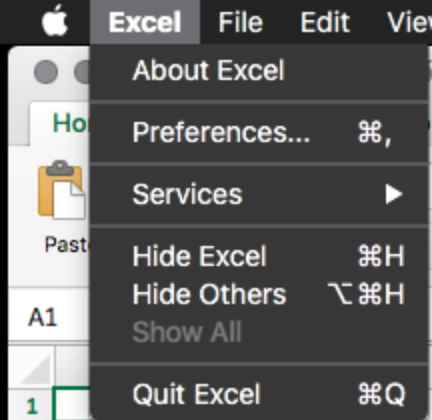


Manage My Money



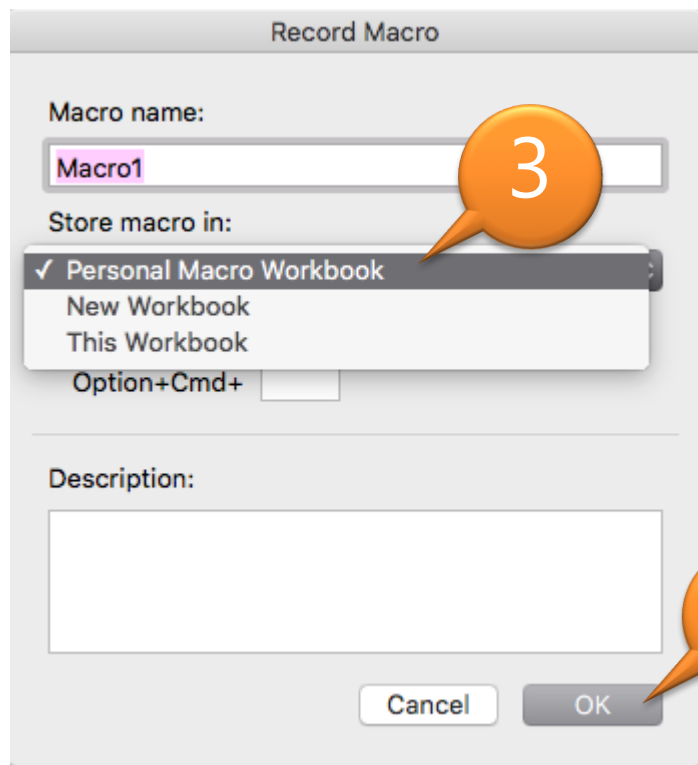
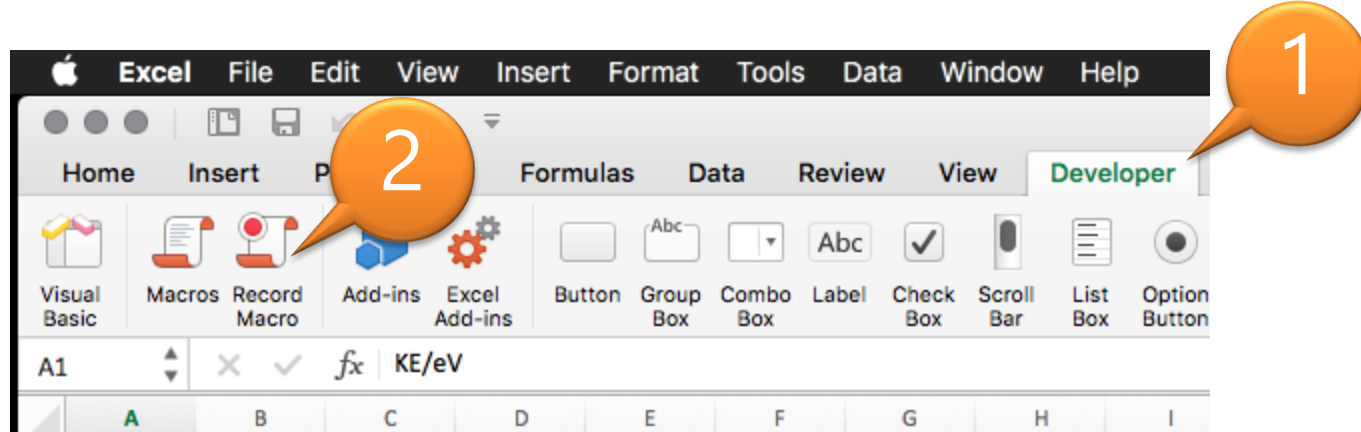
Cancel

Create

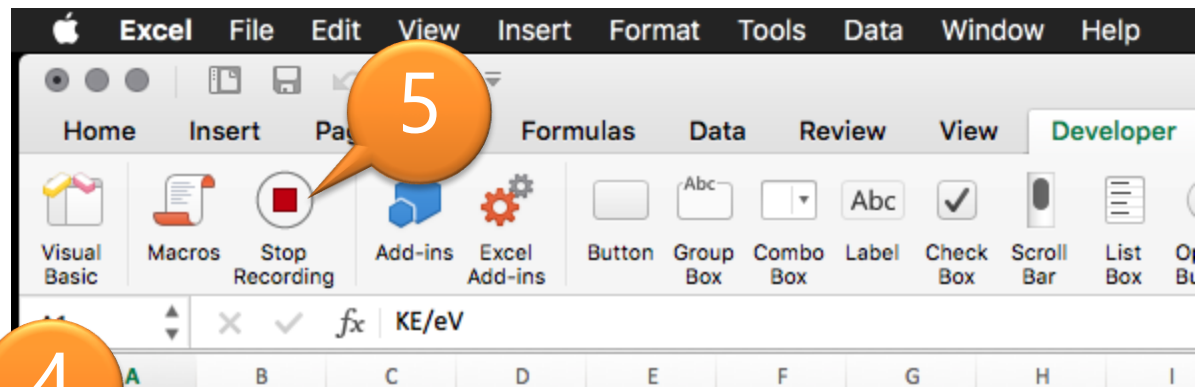


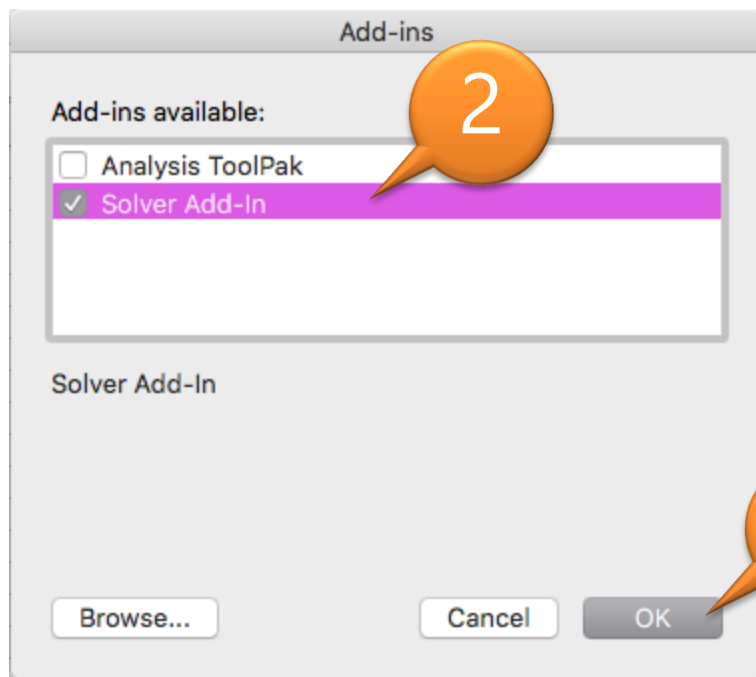
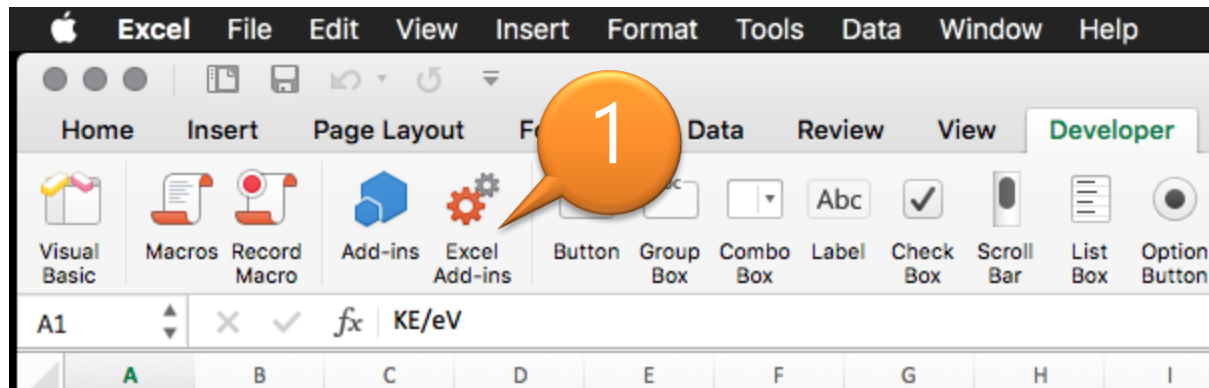
Show the Developer tab.



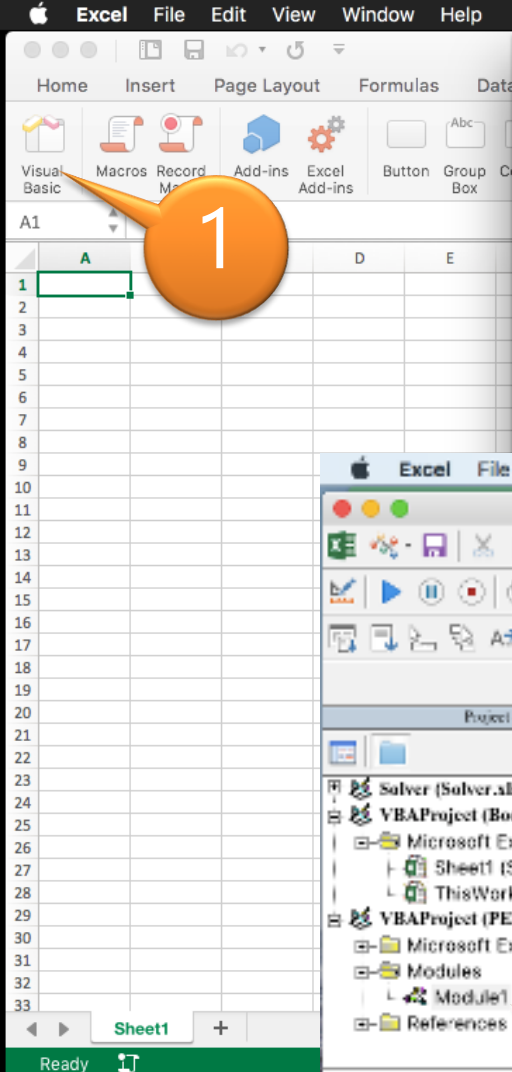


Create the personal macro workbook

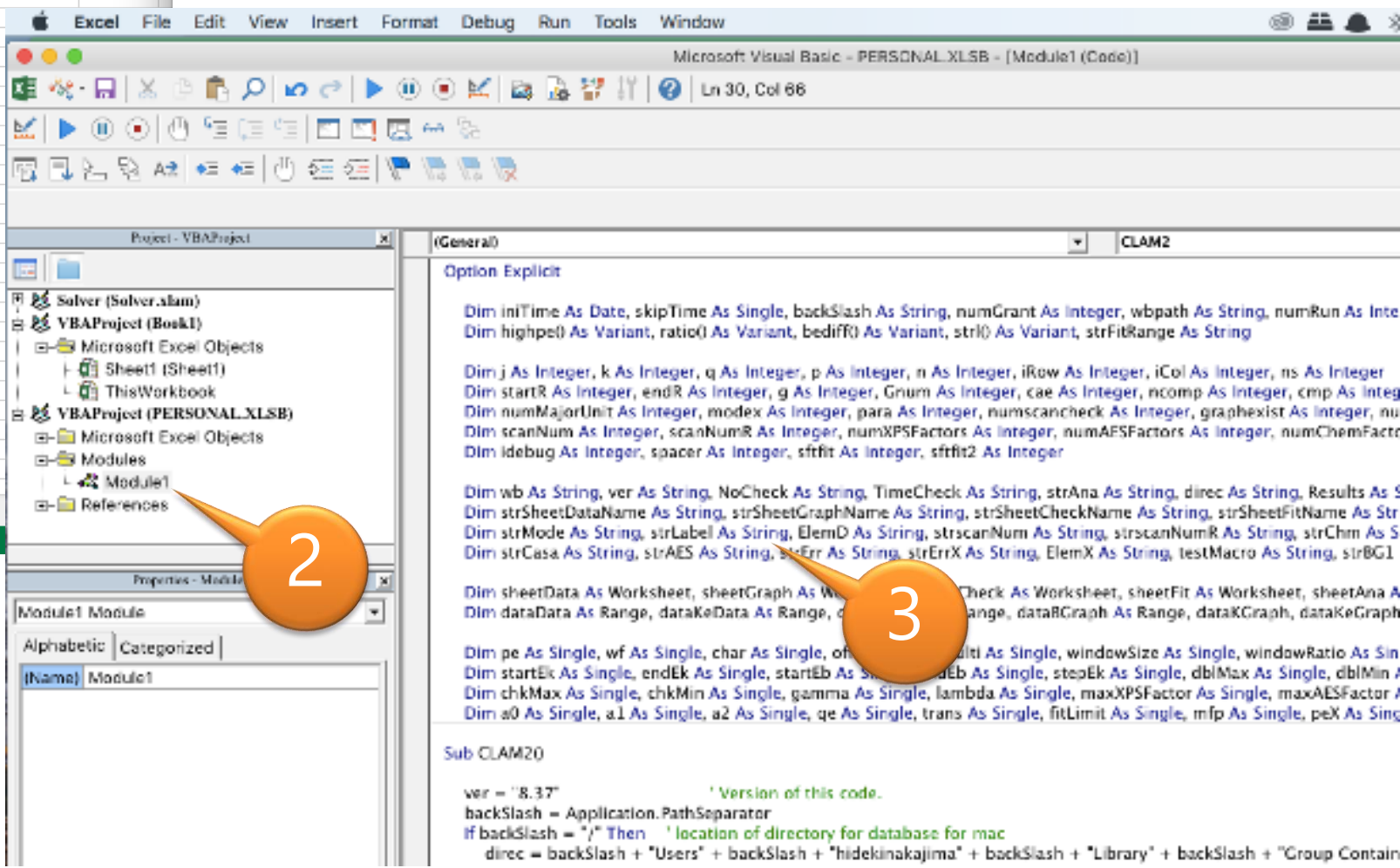




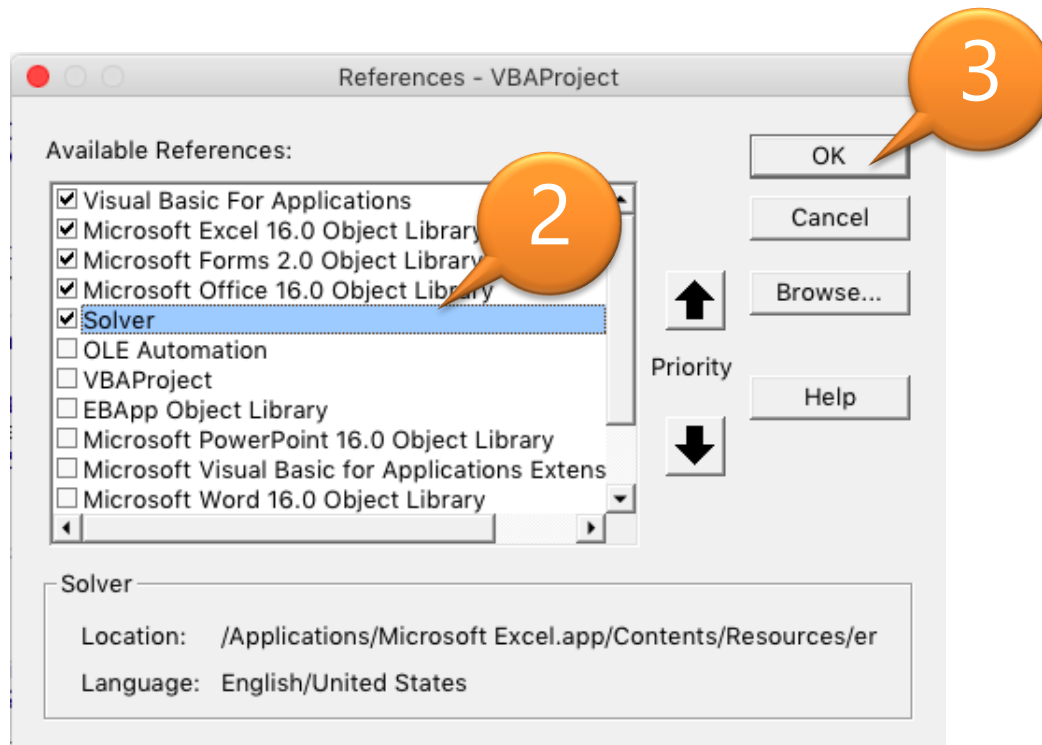
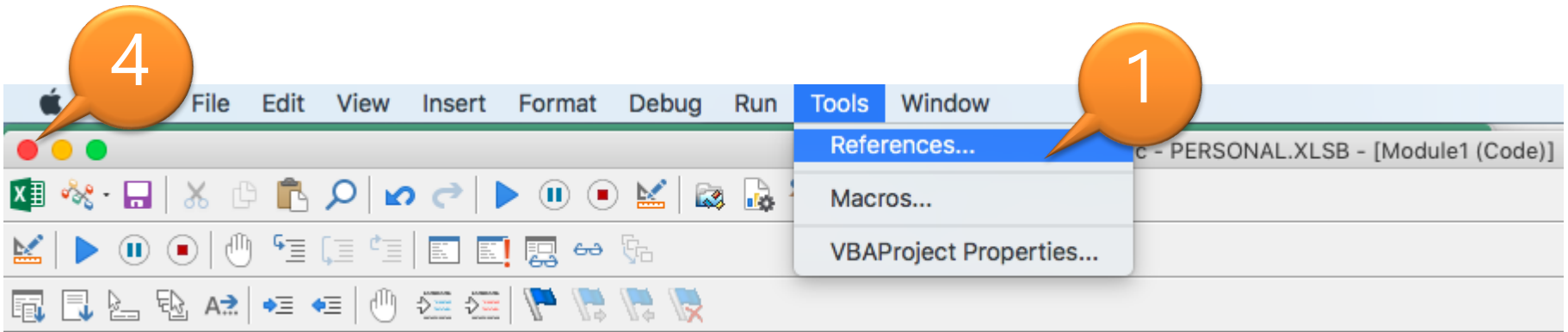
Activate the Solver Add-In

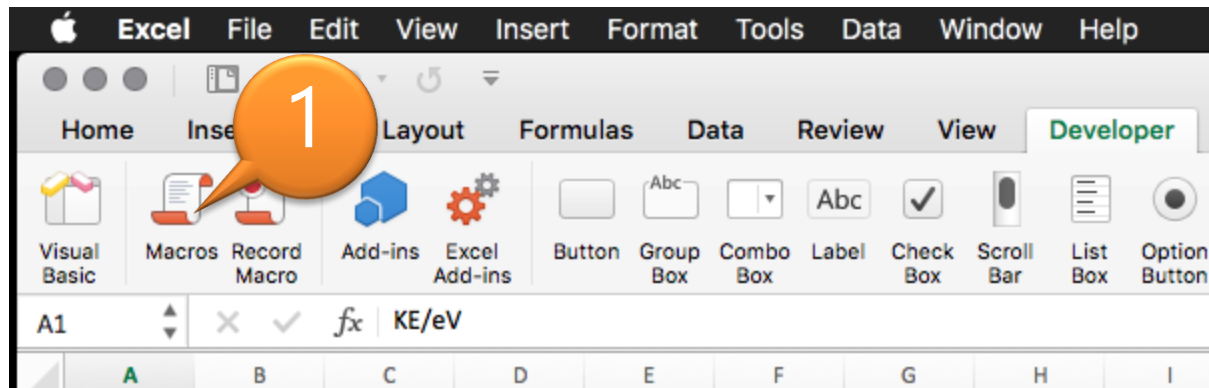


Install the VBA code in the following way;
Switch Visual Basic Editor mode, double-click to open VBAProject (PERSONAL.XLSB)– Module - Module1, and paste the code from LoadCLAMvXXX_std.vb opened with test editor.

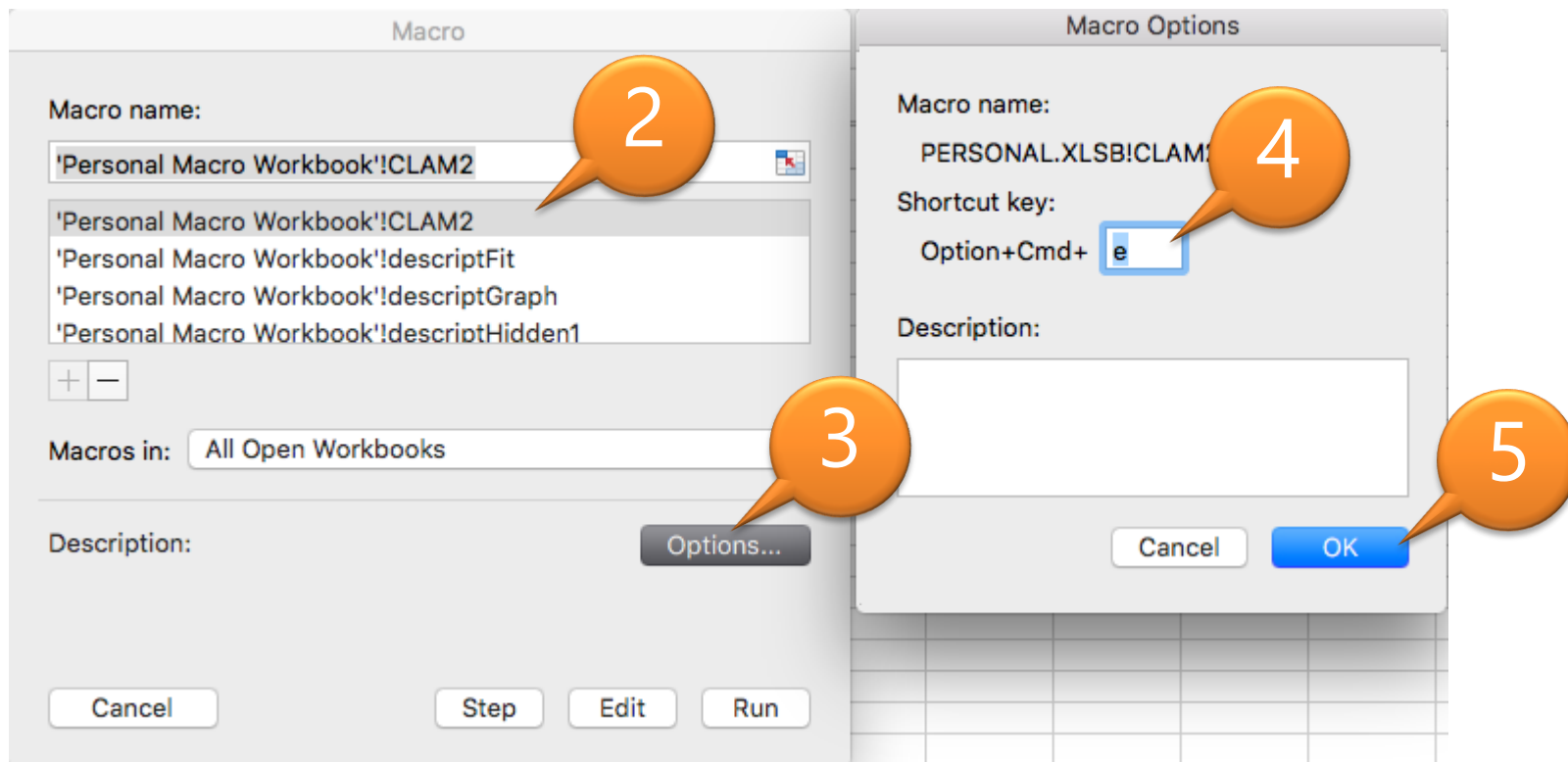


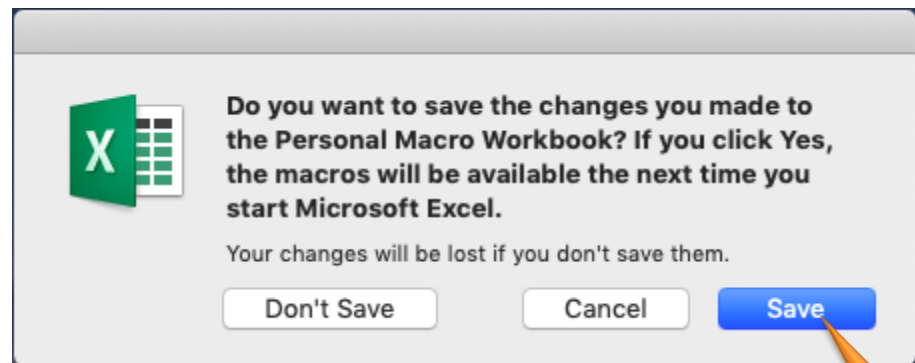
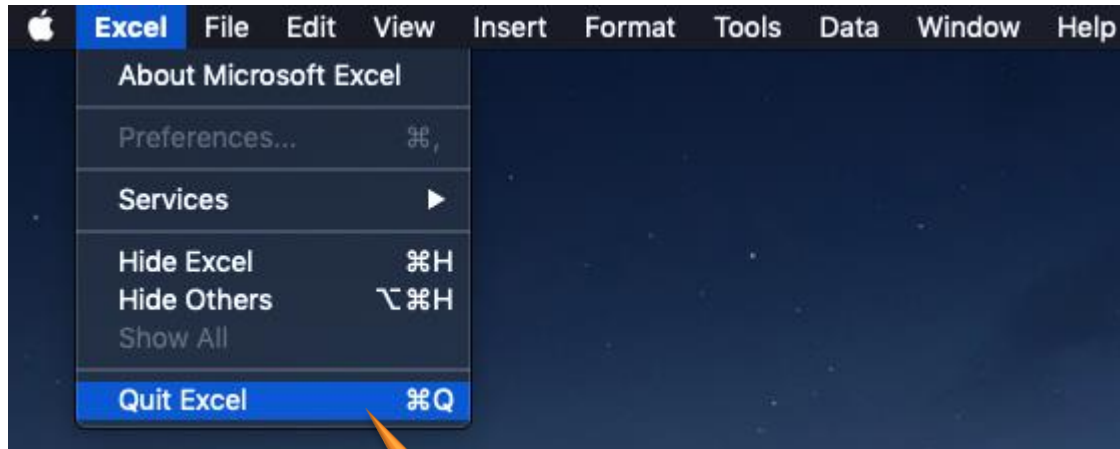
Activate Solver library from menu accessible in the Visual Basic Editor mode.





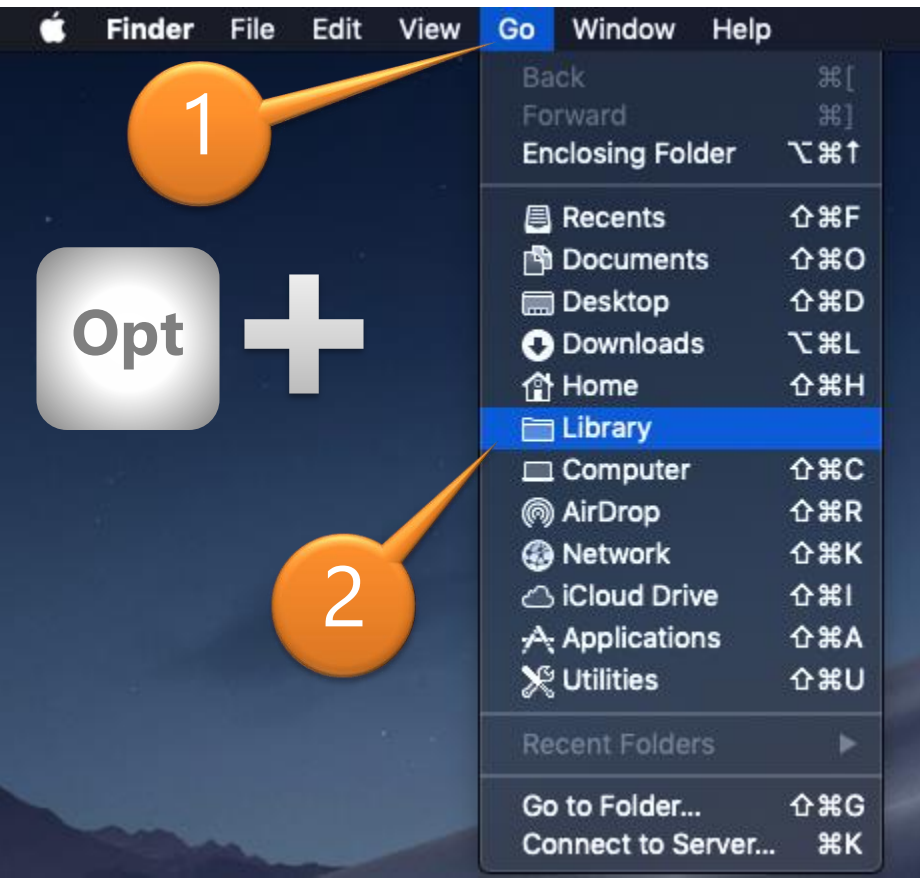
Assign the shortcut key “e”





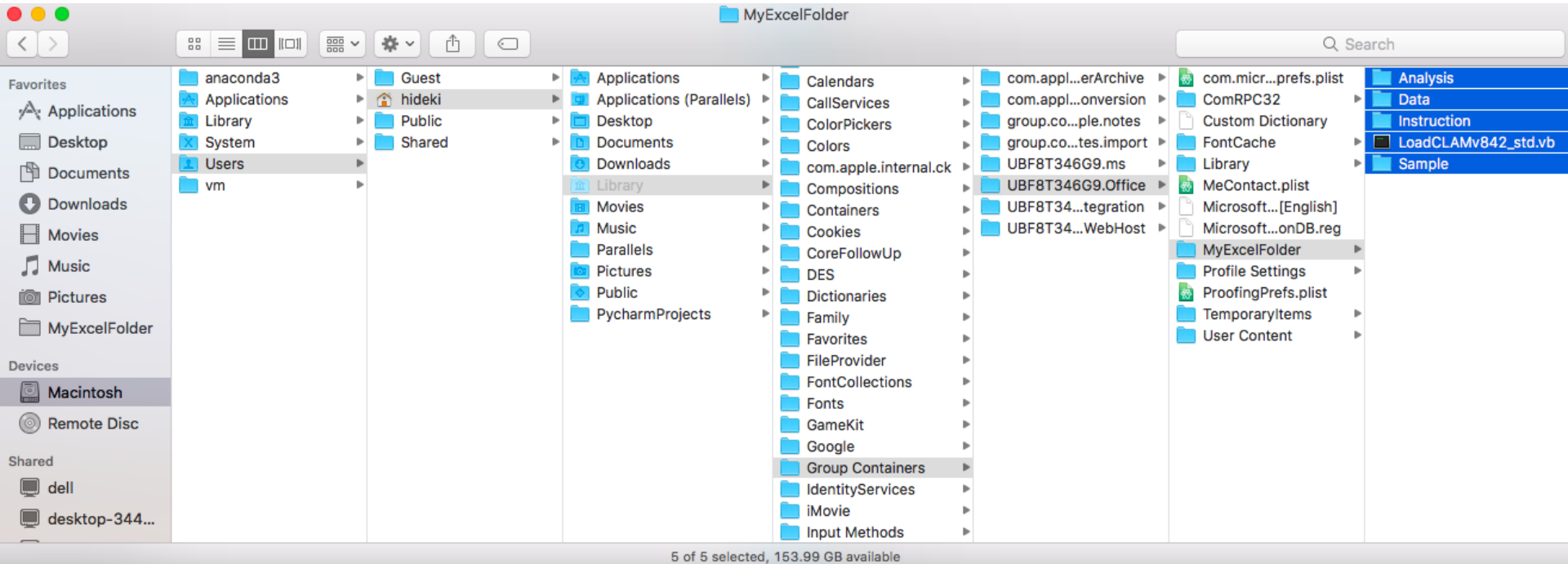
So far, the procedure is the same as that in Windows.
Next slide shows how to create the folder for database on mac.

1. Open a Finder Window
2. Hold the **Alt (Option)** key when you press on **Go** in the Finder menu bar
3. Click on **Library**
4. Open the **Group Containers** folder
5. Open the **UBF8T346G9.Office** folder
6. Create a Folder inside this folder named **MyExcelFolder** for example
7. Select this folder

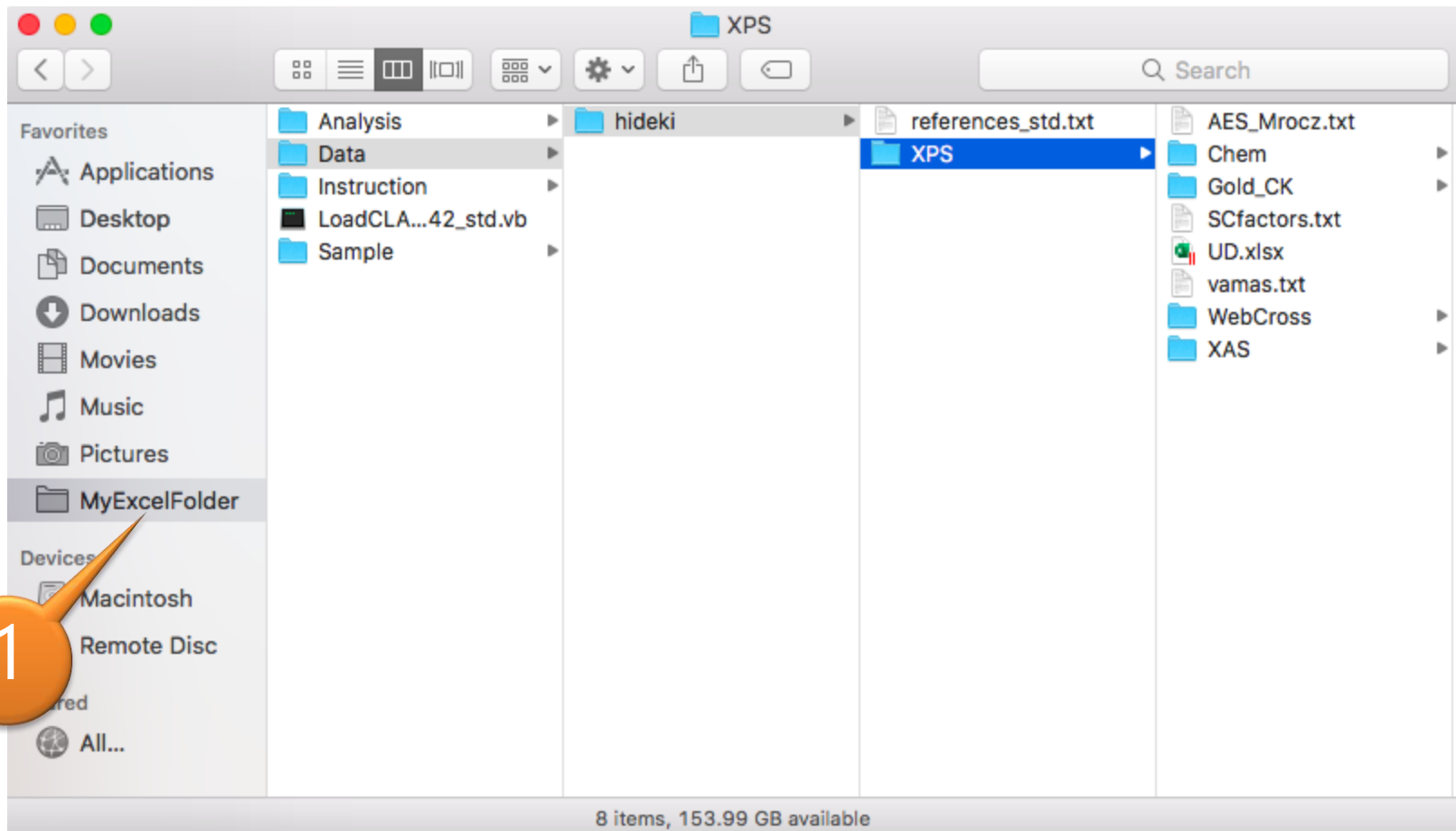


Library folder can be accessed from Go with Option key, otherwise no Library menu appears as shown in Fig.

All unzip files and folders should be placed in
Library/Group Containers/UBF8T346G9.Office/MyExcelFolder/



Drag & drop **MyExcelFolder** into Favorites for next access.



Open the sample file with Excel and use shortcut key.

The screenshot displays an Excel spreadsheet titled "Au4f_sample.xlsx". The spreadsheet contains a table of data with columns for KE/eV, Intensity (arb. units), and Binding energy (eV). The data is organized into two main sections: a table of experimental data (rows 1-33) and a table of calculated data (rows 34-61). The experimental data table has columns for KE/eV, Intensity (arb. units), and Binding energy (eV). The calculated data table has columns for KE/eV, Intensity (arb. units), and Binding energy (eV). The graphs show peaks at 497.2 eV and 497.7 eV. A keyboard shortcut "Cmd + Opt + e" is displayed over the spreadsheet. Two dialog boxes are shown: "Manual input mode" with a text field containing "600" and "Input atomic elements" with a text field containing "Au".

| KE/eV | Intensity (arb. units) | Binding energy (eV) |
|---------------|------------------------|---------------------|
| 110904_1625_1 | 609 | 609 |
| 496.9 | 608 | 584 |
| 497 | 584 | 566 |
| 497.1 | 566 | 555 |
| 497.2 | 555 | 543 |
| 497.3 | 543 | 538 |
| 497.4 | 538 | 532 |
| 497.5 | 532 | 526 |
| 497.6 | 526 | 520 |
| 497.7 | 520 | 514 |
| 497.8 | 514 | 508 |
| 497.9 | 508 | 502 |
| 498 | 502 | 496 |
| 498.1 | 496 | 490 |
| 498.2 | 490 | 484 |
| 498.3 | 484 | 478 |
| 498.4 | 478 | 472 |
| 498.5 | 472 | 466 |
| 498.6 | 466 | 460 |
| 498.7 | 460 | 454 |
| 498.8 | 454 | 448 |
| 498.9 | 448 | 442 |
| 499 | 442 | 436 |
| 499.1 | 436 | 430 |

Manual input mode

600

Cancel OK

Input atomic elements

Au

Cancel OK

Select the worksheet "Fit_filename" and use shortcut key.

Excel File Edit View Insert Format Tools Data Window Help

Au4f_sample.xlsx

Home Insert Page Layout Formulas Data Review View Developer

Calibri (Body) 12 A A

Wrap Text

General

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

AutoSum Fill Clear Sort & Filter

A1 Shirley

1 Shirley BG

2 Tolerance

3 Initial A

4 Final A

5 Iteration

6

7

8

9

10

11 Solve BGS

12 Peak fit

13 # peaks

14 Solve LSM

15 Fit range

16 Start / eV 77

17 End / eV 97

18 Factors for N.Area

19 CAE 23.5

20 Grating 0

21 IMFP 0.60000002

22 a 180.253998

23 b 0.34799999

24 theta 45

25

26

27

28

29

30 BE / eV In

31 97 609

32 96.9 553

33 96.8 591

Fit_Au4f_sample Graph_Au4f_sample Au4f_sample

Ready Calculate

Intensity normalized by I_p (arb. units)

3058.98

2558.98

2058.98

1558.98

1058.98

558.98

58.98

98 96 94 92 90 88 86 84 82 80 78 76

Binding energy (eV)

Excel File Edit View Insert Format Tools Data Window Help

Au4f_sample.xlsx

Home Insert Page Layout Formulas Data Review View Developer

Calibri (Body) 12 A A

Wrap Text

General

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

AutoSum Fill Clear Sort & Filter

A1 Shirley

1 Shirley BG

2 Tolerance 0.000001

3 Initial A 0.001

4 Final A 0.00343967

5 Iteration 10

6

7

8

9

10

11 Solve BGS 0.53381724

12 Peak fit

13 # peaks 2

14 Solve LSM 11.9149525

15 Fit range

16 Start / eV 77

17 End / eV 97

18 Factors for N.Area

19 CAE 23.5

20 Grating 0

21 IMFP 0.60000002

22 a 180.253998

23 b 0.34799999

24 theta 45

25

26

27

28

29

30 BE / eV In

31 97 609

32 96.9 553

33 96.8 591

Fit_Au4f_sample Graph_Au4f_sample Au4f_sample

Ready Calculate

Name Au4f7/2 Au4f5/2

BE 83.7995939 87.3995939

KE 509.200406 505.600406

FWHM1 2.17909878 2.8510928

FWHM2

Amplitude 2725.34149 2044.00612

Shape Gauss Gauss

Option a

Option b

Option c

Form G G

beta 1 1

Amp+BG 2843.34149 2162.00612

RSF 9.57999992 7.53999996

P. Area 6333.00464 6214.49017

S. Area 661.065208 824.202945

N. Area 767.982995 961.52355

Asym

Amp. rat. (4; 3)

BE diff. [3.6]

T.I. Area 6334.61053 6216.06601

S.I. Area 661.232837 824.411942

N.I. Area 768.177736 961.767369

Corr. RSF 8.24628238 6.46317001

Intensity normalized by I_p (arb. units)

3058.98

2558.98

2058.98

1558.98

1058.98

558.98

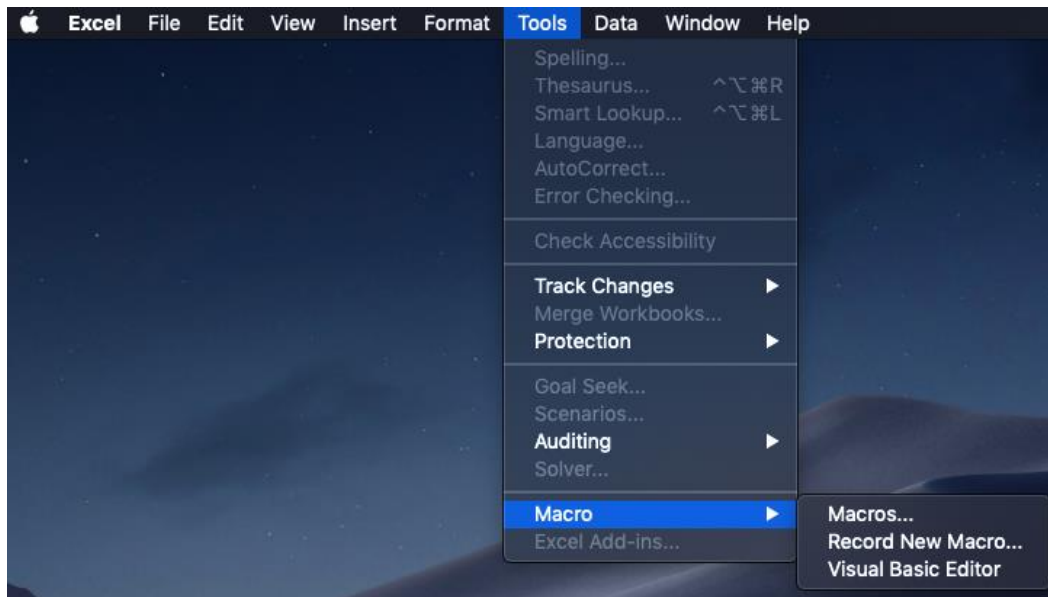
58.98

98 96 94 92 90 88 86 84 82 80 78 76

Binding energy (eV)

Batch processing

- Excel Mac has no blank window available, then batch processing mode cannot be performed.
- However, Menu bar - Tools - Macro - Macros ... - debugAll to run batching mode without opening any text files or workbooks in **MyExcelFolder**.



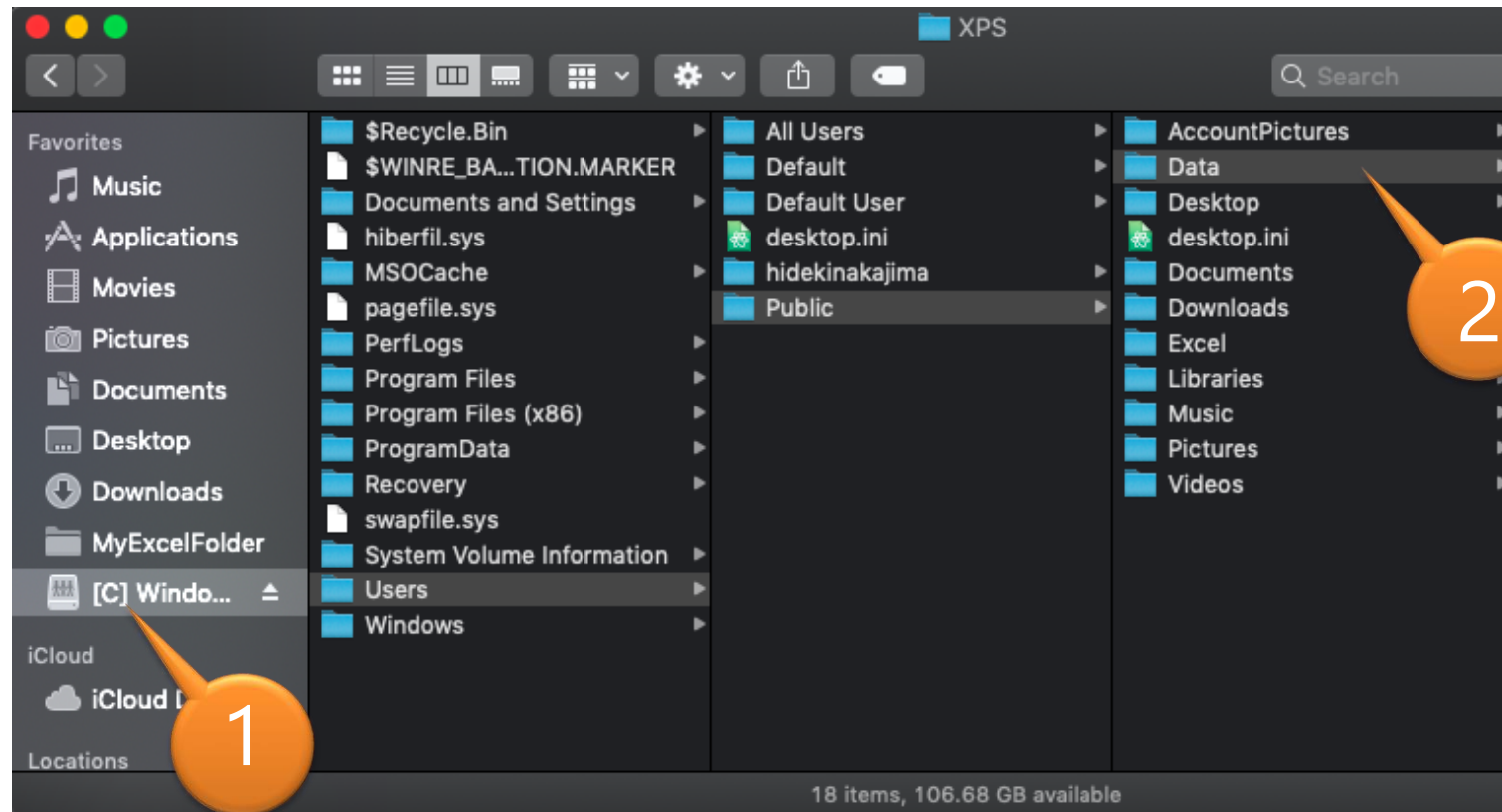
Virtual machine environment on macOS

EXCEL ON PARALLEL DESKTOP

Installation is the same as that used in the Windows Excel.

except

Database files under the folder "C:\Users\Public\Data\hideki\XPS\
It is important to find the Public folder under the [C] drive.



Then, the database location should be changed to `direc = "C:\Users\Public\Data\hideki\XPS\`

```
Sub CLAM2()  
  
ver = "8.42a" ' Version of this code.  
If Application.OperatingSystem Like "*Mac*" Then  
    backSlash = "/"  
Else  
    backSlash = "\"  
End If  
If backSlash = "/" Then ' location of directory for database  
    direc = "Library" + backSlash + "Group Containers" + backSlash + "UBF8T346G9.Office" + backSlash + "MyExcelFolder" + backSlash + "Data" + backSlash + "hideki"  
    ' mac: note "apple" should be replaced with your <username>.  
    'direc = backSlash + "Users" + backSlash + "hidekinakajima" + backSlash + "Library" + backSlash + "Group Containers" + backSlash + "UBF8T346G9.Office" + back  
    'direc = backSlash + "Users" + backSlash + "apple" + backSlash + "Documents" + backSlash + "XPS" + backSlash  
Else ' Windows  
    'direc = "D:\Excel XPS_macro\DATA\hideki\XPS\" ' this is for Windows PC with HDD storage.  
    direc = "C:" + backSlash + "Users" + backSlash + "Public" + backSlash + "Data" + backSlash + "hideki" + backSlash + "XPS" + backSlash ' this is for BOOTCAMP  
    'direc = "G:" + backSlash + "Data" + backSlash + "Hideki" + backSlash + "XPS" + backSlash ' test  
End If
```

1

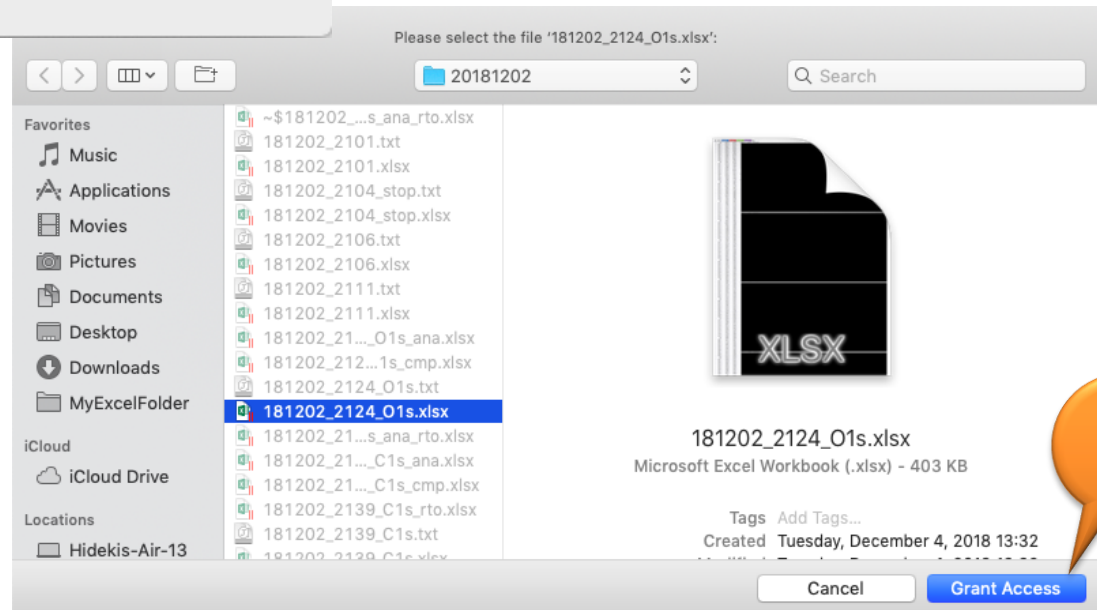
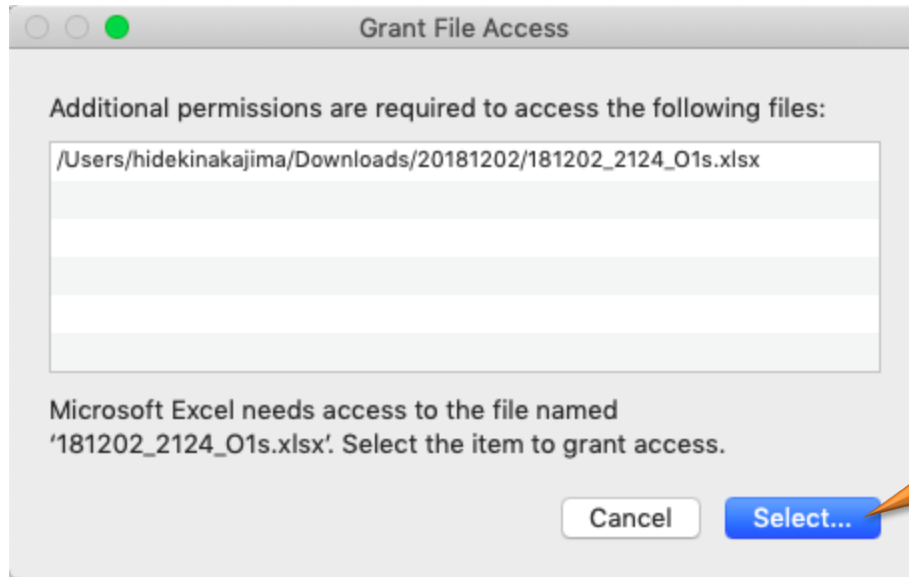
2

Save PERSONAL.XLSB

If you want to analyze the data outside MyExcelFolder

FILE ACCESS ISSUE

You need to grant file access every first access to the file.



References

- Multiple-file access granted on mac
 - <https://msdn.microsoft.com/en-us/library/office/mt654020.aspx>
 - <https://warwick.ac.uk/fac/sci/systemsbiology/staff/dyer/software/excelvbafileopen/>
- Excel 2016 on Mac updater packages
 - <https://macadmins.software/>
- Excel 2016 on Mac solutions
 - <https://www.rondebruin.nl/mac/mac015.htm>
 - <http://www.rondebruin.nl/mac/mac034.htm>