

Introduction of the digitization software GDgraph

NRDC 2014 Meeting (Smolenice)

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China Nuclear Data Center
China Institute of Atomic Energy (CIAE)

May 8, 2014



Contents

- 1 Short History
- 2 GDgraph: A graph digitizing software
- 3 Summary

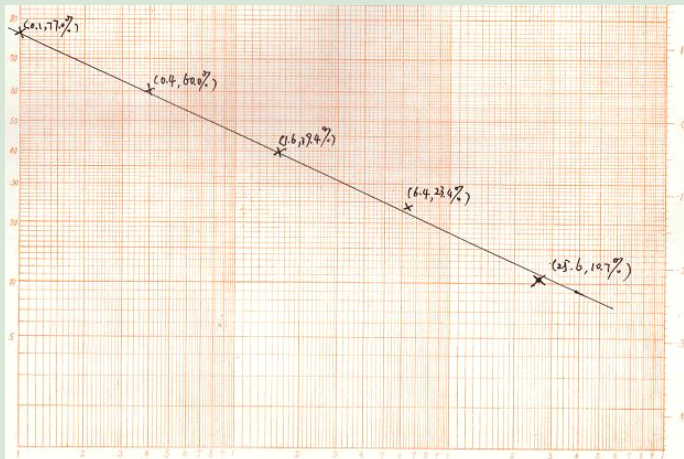
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Short History

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① Requirements from evaluation & measurement



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- 2 Start to develop a software for digitization since 1997
- 3 GDgraph develops using from VC++ to Perl
- 4 Version-5.0, Windows, Chinese & English
- 5 Software:
- 6 Manual: <https://www-nds.iaea.org/publications/nds/iaea-nds-0216>

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https://www-nds.iaea.org/ndc/ndc_sft

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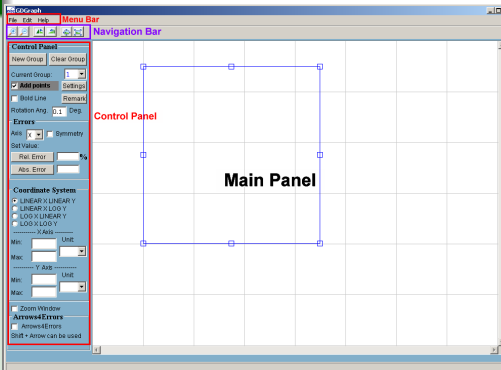
Contents

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GDgraph: A graph digitizing software

Main Features

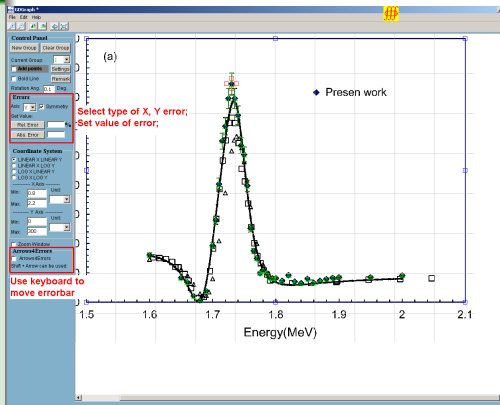
- 1 Update at 2013, Perl
- 2 Chn→Chn&Eng
- 3 GUI: Dialogue → Single Doc. Interface
- 4 Support BMP, JPEG, PNG, GIF ...
- 5 Load or Copy an image from clipboard



GDgraph: A graph digitizing software

Main Features

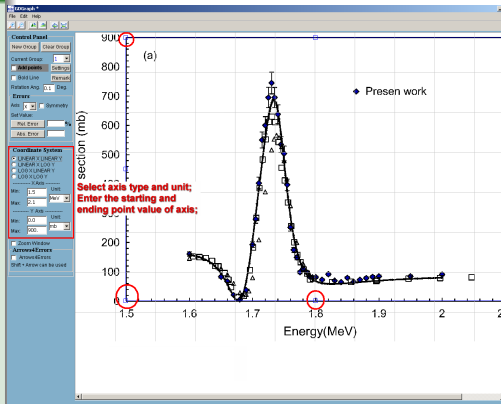
- 6 X,Y error in symmetry & asymmetry
- 7 Set X,Y error in abs. or %
- 8 Set coordinate(type, value, unit)
- 9 Project(*.gdp) & Remarks function
- 10 Setting Function



GDgraph: A graph digitizing software

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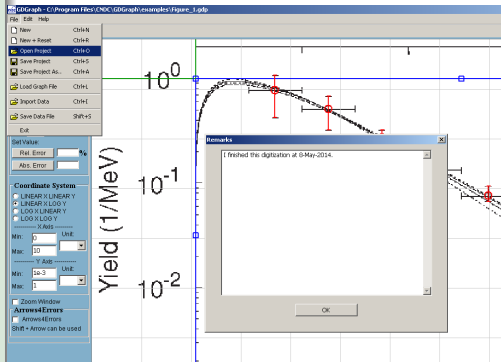
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GDgraph: A graph digitizing software

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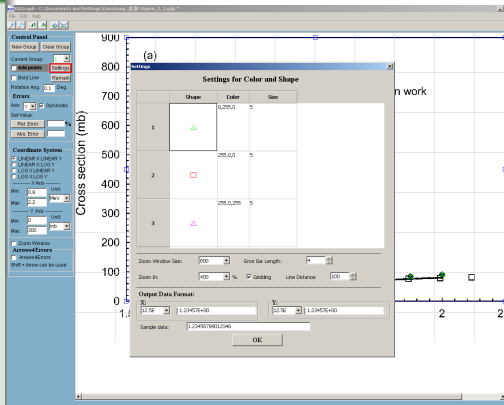
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GDgraph: A graph digitizing software

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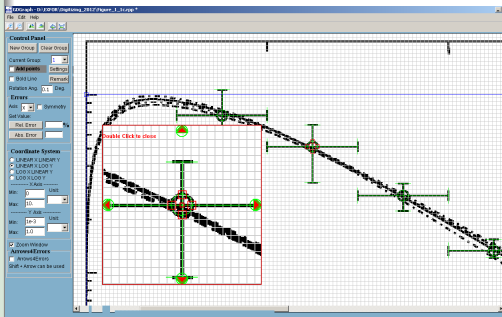
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GDgraph: A graph digitizing software

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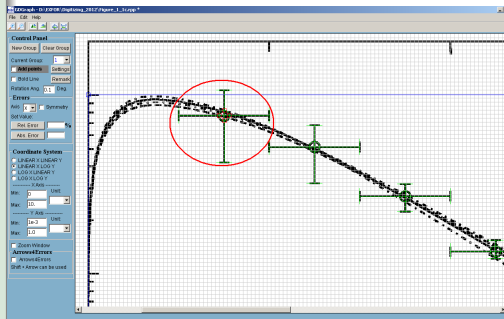
- 11 **Magnifying Glass function**
- 12 Use "Pageup" & "Pagedown" to select Pre. or Next point
- 13 Add shortcut keys to digitize error
- 14 Import Data function



GDgraph: A graph digitizing software

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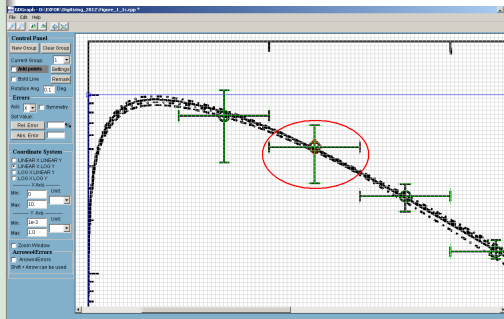
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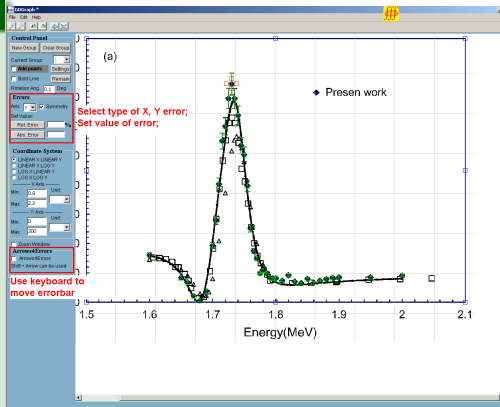
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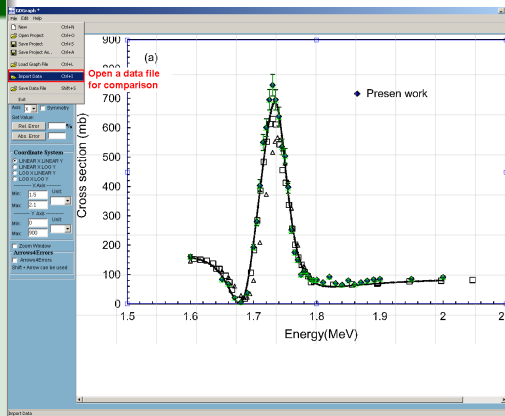
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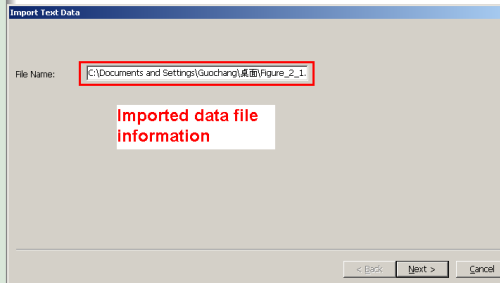
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Import Text Data

Control Label: put the label on the first of the line.

Data Label: | Title Label: |#

Text Label: || all lines after this table will be discard until data label is found.

Contents: revised directly

Set different labels to separate different contents

1	!	#####group 1 #####(39 points) #####						
2	0	#	X (MeV)	Y (mb)	dY+	dY-	dx-	dx+
3	0							
4	1.	599985e+000	1.612304e+002	7.883212e+000	7.883212e+000	0.000000e+000	0.00	
5	1.	650022e+000	8.314911e+001	4.129301e+000	4.129301e+000	0.000000e+000	0.00	
6	1.	660046e+000	6.794578e+001	3.941606e+000	3.753910e+000	0.000000e+000	0.00	
7	1.	669984e+000	2.102190e+001	0.000000e+000	0.000000e+000	0.000000e+000	0.00	
8	1.	680009e+000	6.193952e+000	0.000000e+000	0.000000e+000	0.000000e+000	0.00	
9	1.	690033e+000	3.791449e+001	0.000000e+000	0.000000e+000	0.000000e+000	0.00	
10	1.	699971e+000	1.933264e+002	9.384776e+000	9.760167e+000	0.000000e+000	0.00	

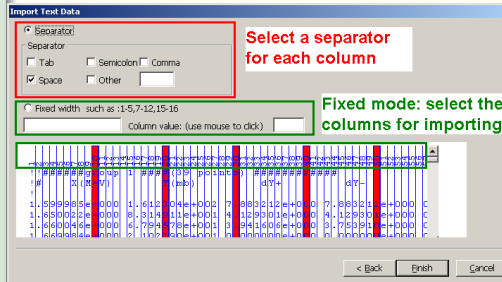
Data content panel

< Back Next > Cancel

GDgraph: A graph digitizing software

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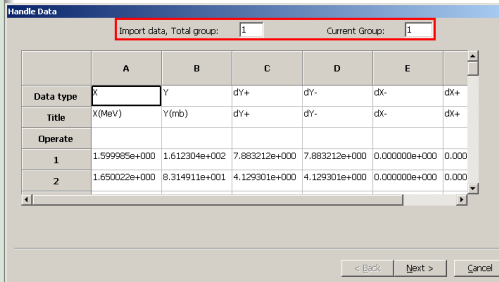
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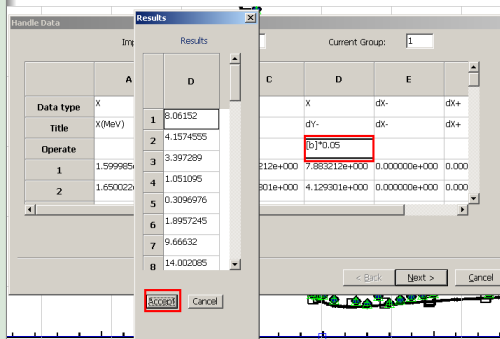
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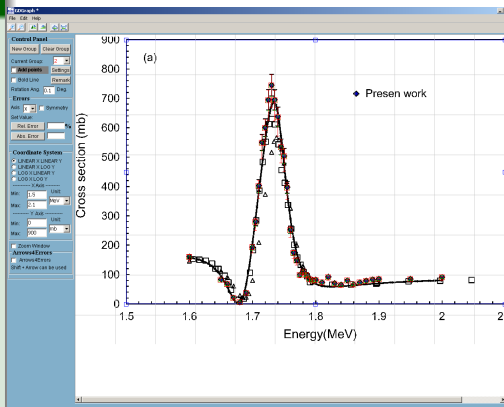
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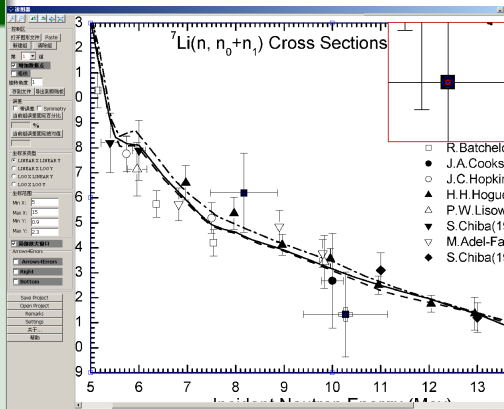
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Setting Function

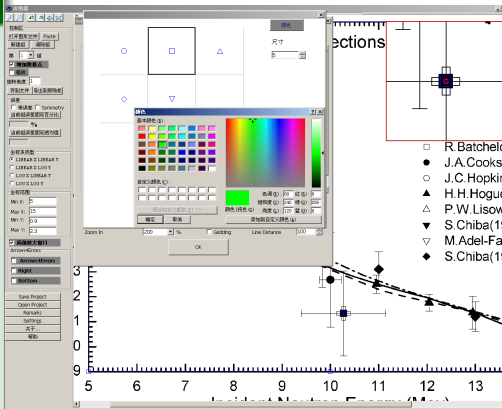
- 1 Point symbol, color, size
- 2 Zoom-in window size
- 3 Multiple of zoom in
- 4 Length of errorbar cross line
- 5 Grid line & space
- 6 Output data format



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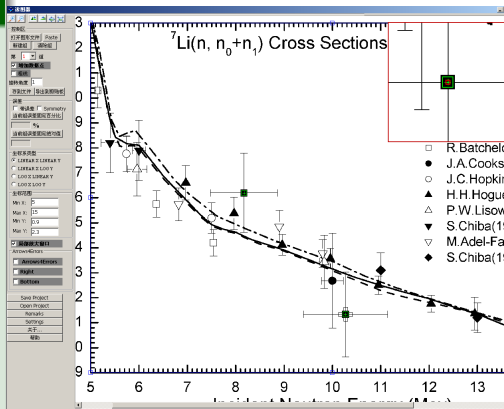
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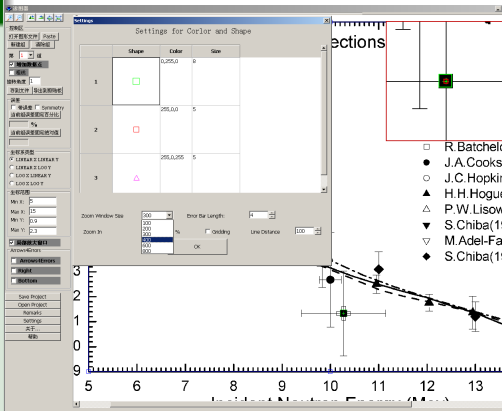
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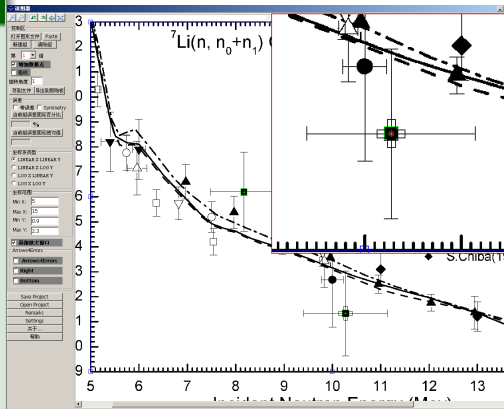
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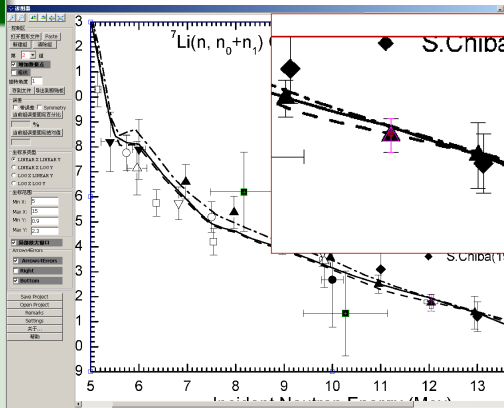
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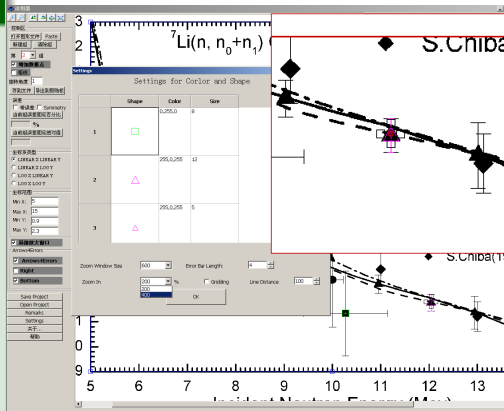
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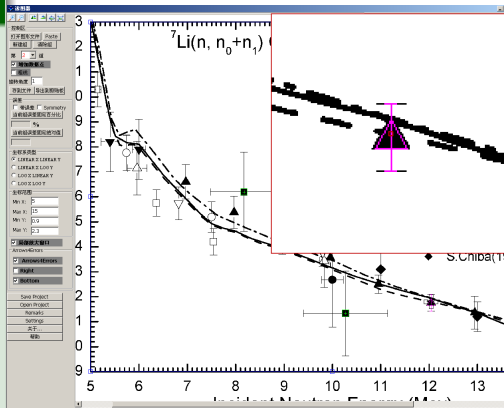
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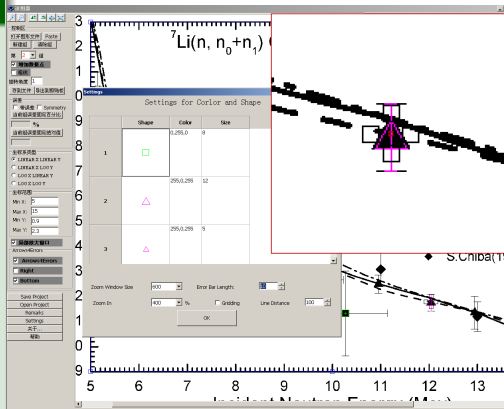
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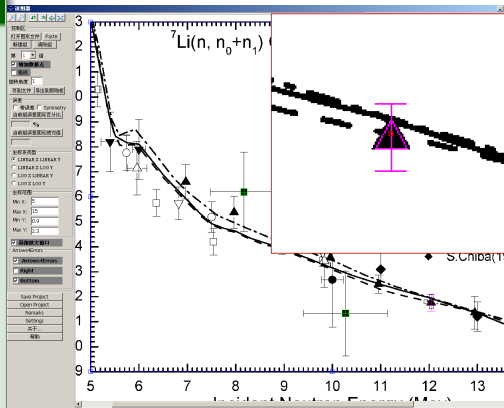
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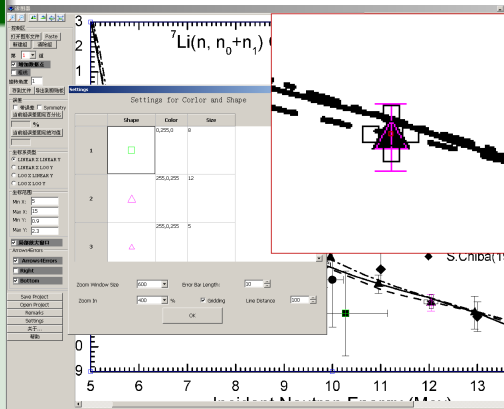
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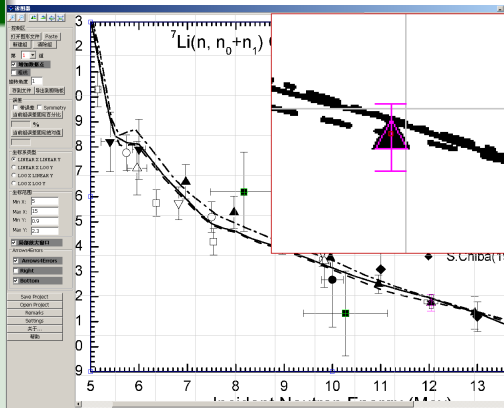
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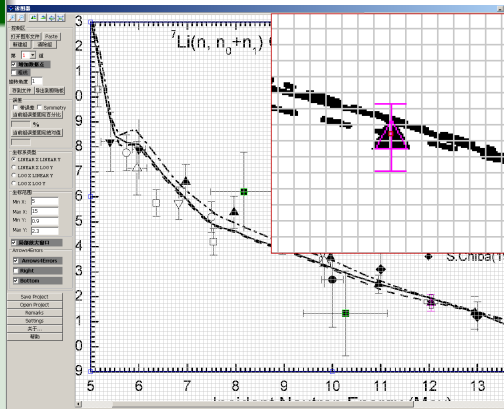
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- ① Point symbol, color, size
- ② Zoom-in window size
- ③ Multiple of zoom in
- ④ Length of errorbar cross line
- ⑤ Grid line & space
- ⑥ Output data format

Settings

Settings for Color and Shape

Group	Shape	Color	Size
1		0,255,0	5
2		255,0,0	5
3		255,0,255	5

Zoom Window Size: Error Bar Length:

Zoom In: % Gridding Line Distance:

Output Data Format:

Data format

X: Y:

Sample data: **output example**

OK

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Summary

- 1 Requirements from evaluation and measurement for developing digitization software
- 2 GDgraph: a software is developed for digitization since 1997
- 3 Present version is fit for digitization requirements
- 4 Some bugs and functions should be developed in future such as symbols, automatic searching axis, ...
- 5 Adopt good characters and functions from other softwares

Thank you for your
attention!

Welcom to China!



