mtexeulertohklソフトウエア

2025年04月01日 *1. HelperTex Office*

1. 概要

MTEXでODF解析結果から[value,ori]=max(odf,'numLocal',6)で出力された ori = orientation (Aluminum -> xyz (mmm)) size: 1 x 4

Bunge Euler angles in degree							
phi1	Phi	phi2	Inv.				
341.192	0.0361972	18.9146	0				
179.904	44.9611	180.075	0				
144.73	44.9754	179.921	0				
90.0612	36.1843	225.058	0				

をエディッターに貼り付けファイル出力したデータから

(hkl)[uvw]を計算しvolumeFraction用コマンドを作成し

r e s u l t. t x t ファイルに書き出すソフトウエア

- 2. CTR¥bin¥mtexeulertohkl.jar ファイルをダブルクリックで起動
- 3. スタート画面

ODFPoleFigure2 ソフトウエア ToolKit—>SoftWare->Page—>Nest2

🛓 Page3		×
PoleFigure to Cluster TXT2 Format	PoleFiguretoProfile	Cluster Format(TXT)
Cluster Raw,Asc,TXT Format	Cluster	Display
Data processing Raw,Asc,TXT Format	Rawdataread	Display
FODF-FiberDisplay ODFDisplay TXT data	FiberMultiDisplay	Display
CTRHolderChanger CTRSSD	CTRConversion	Enviroment chenger
jre-ctr-sizecheck jre,CTR	javajreCheker	size check
openJDK select openJDKpath	setOpenJDK	Bach file
EBSDAngFmat Input euler angles	EBSDAngdataMaker	EBSDAngFomat
EBSDdata Input ang ctf txt	EBSDtoODF	EBSDAng,CTF,SOR Format
MTEX Export file	mtexeulertohkl	HKL,MTEXcommand

4. 使い方

MTEXeulertoHKL		- 🗆 X
File Help		
┌ MTEX-eulerfile /		
MTEX-txt		
volume(odf, ori, angle*degree)	angle : 15	Calc
方位の広がり指定		ーー・ 計算開始と result.txt ファイル作成

MTEXの euler リストの選択

5. データ変換

	- 🗆 ×
File Help	
MTEX-eulerfile	
MTEX-txt I¥MTEXPlus-cube-goss-brass-copper¥ref¥MTEX¥Bunge_Eu	ler_angles_in_degree.txt
Bunge Euler angles in degree phi1 Phi phi2 Inv. 341.192 0.0361972 18.9146 0 179.904 44.9611 180.075 0 144.73 44.9754 179.921 0 90.0612 36.1843 225.058 0	
volume(odf, ori, angle*degree) angle : 15	Calc — — — X
r MTEX-eulerfile	
MTEX-txt I¥MTEXPlus-cube-goss-brass-copper¥ref¥MTEX¥Bunge_E	uler_angles_in_degree.txt
ori0=orientation.byEuler(341.192*degree,0.0361972*degree,18.9 volume(odf,ori0,15*degree) ori1=orientation.byEuler(179.904*degree,44.9611*degree,180.07 volume(odf,ori1,15*degree) ori2=orientation.byEuler(144.73*degree,44.9754*degree,179.92* volume(odf,ori2,15*degree) ori3=orientation.byEuler(90.0612*degree,36.1843*degree,225.08 volume(odf,ori3,15*degree)	0146*degree,CS,SS) 75*degree,CS,SS) 1*degree,CS,SS) 58*degree,CS,SS)
ori0=orientation.byEuler(341.192*degree,0.0361972*degree,18.9 volume(odf,ori0,15*degree) ori1=orientation.byEuler(179.904*degree,44.9611*degree,180.07 volume(odf,ori1,15*degree) ori2=orientation.byEuler(144.73*degree,44.9754*degree,179.927 volume(odf,ori2,15*degree) ori3=orientation.byEuler(90.0612*degree,36.1843*degree,225.05 volume(odf,ori3,15*degree) 0.0 0.0 (0 0 1)[1 180.0 45.0 180.0 (0 -1 1)[7 144.736 45.0 180.0 (0 -1 1)[7 90.0 35.264 225.0 (-1 -1 2)[ori0=orientation.byMiller([0 0 1],[1 0 0],CS,SS) 0 0	0146*degree,CS,SS) 75*degree,CS,SS) 1*degree,CS,SS) 58*degree,CS,SS) 0 0] 0 0] 2 1 1] 1 1 1]
ori0=orientation.byEuler(341.192*degree,0.0361972*degree,18.9 volume(odf,ori0,15*degree) ori1=orientation.byEuler(179.904*degree,44.9611*degree,180.07 volume(odf,ori1,15*degree) ori2=orientation.byEuler(144.73*degree,44.9754*degree,179.927 volume(odf,ori2,15*degree) ori3=orientation.byEuler(90.0612*degree,36.1843*degree,225.05 volume(odf,ori3,15*degree) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.111 180.0 180.0 (0 - 1 1)[7 144.736 45.0 180.0 90.0 35.264 225.0 ori0=orientation.byMiller([0 0 1],[1 0 0],CS,SS) volume(odf,ori0,15*degree) ori1=orientation.byMiller([0 -1 1],[1 0 0],CS,SS) volume(odf,ori1,15*degree)	0146*degree,CS,SS) 75*degree,CS,SS) 1*degree,CS,SS) 58*degree,CS,SS) 0 0] 0 0] 2 1 1] 1 1 1]

6. Result.txt ファイルをエディッターで読み込む

Image: Euler angles in degree↓ Bunge: Euler angles in degree↓ at1.192 0.0361972 18.9146 0↓ 179.904 44.9611 180.075 0↓ 90.0612 36.1843 225.058 0↓ 0.0361972*degree,18.9146*degree,CS,SS)↓ volume(odf,ori0,15*degree)↓ 0↓ ori0=orientation.byEuler(341.192*degree,0.0361972*degree,180.075*degree,CS,SS)↓ volume(odf,ori1,15*degree)↓ ori2=orientation.byEuler(179.904*degree,44.9611*degree,180.075*degree,CS,SS)↓ volume(odf,ori2,15*degree)↓ ori3=orientation.byEuler(144.73*degree,44.9754*degree,179.921*degree,CS,SS)↓ volume(odf,ori3,15*degree)↓ ori3=orientation.byEuler(90.0612*degree,36.1843*degree,225.058*degree,CS,SS)↓ volume(odf,ori3,15*degree)↓ ↓ 0.0 0.0 (0 -1 1)[1 0 0]↓ 180.0 425.0 (-1 -1 2)[1 1 1]↓ ↓ 0.0 35.264 225.0 0.1 0.5.264 225.0 (-1 -1 2)[1 1 1]↓ ↓ 0.0 35.264 225.0 (-1 -1 2)[1 1 1]↓ ↓ 0.0 35.264 225.0 (-1 -1 2)[1 1 1]↓	ファイル(F)	編集(E)	表示(V)	検索(S)	ウィンドウ(W) マクロ(M)	その他(O)					
Burge Euler angles in degree↓ phi1 Phi phi2 Inv.↓ 341.192 0.0361972 18.9146 0↓ 179.904 44.9611 180.075 0↓ 144.73 44.9754 179.921 0↓ 90.0612 36.1843 225.058 0↓ ↓ oriD=orientation.byEuler(341.192*degree,0.0361972*degree,18.9146*degree,CS,SS)↓ volume(odf,ori0,15*degree)↓ ori1=orientation.byEuler(179.904*degree,44.9611*degree,180.075*degree,CS,SS)↓ volume(odf,ori1,15*degree)↓ ori2=orientation.byEuler(144.73*degree,44.9754*degree,179.921*degree,CS,SS)↓ volume(odf,ori2,15*degree)↓ ori3=orientation.byEuler(90.0612*degree,36.1843*degree,225.058*degree,CS,SS)↓ volume(odf,ori3,15*degree)↓ ↓ 0.0 0.0 0.0 (0 0.1)[1 0 0]↓ 180.0 45.0 180.0 (0 -1 1)[1 0 0]↓ 144.736 45.0 180.0 (0 -1 1)[2 1 1]↓ ↓ ori1=orientation.byMiller([0 0 1],[1 0 0],CS,SS)↓ volume(odf,ori1,15*degree)↓ ori1=orientation.byMiller([0 -1 1],[2 1 1],CS,SS)↓ volume(odf,ori2,15*degree)↓ ori1=orientation.byMiller([0 -1 1],[2 1 1],CS,SS)↓ volume(odf,ori2,15*degree)↓ ori1=orientation.byMiller([0 -1 1],[2 1 1],CS,SS)↓ volume(odf,ori3,15*degree)↓ ori3=orientation.byMiller([-1 -1 2],[1 1 1],CS,SS)↓ volume(odf,ori3,15*degree)↓ ori3=orientation.byMiller([-1 -1 2],[1 1 1],CS,SS)↓ volume(odf,ori3,15*degree)↓	2	► 💾	?	1 🔀	11 🔍	Q ♣ Q	1	2				
volume(odf,ori2,15*degree)↓ ori3=orientation.byEuler(90.0612*degree,36.1843*degree,225.058*degree,CS,SS)↓ volume(odf,ori3,15*degree)↓ ↓ 0.0 0.0 0.0 (0 0.1)[1 0 0]↓ 180.0 45.0 180.0 (0 -1 1)[1 0 0]↓ 144.736 45.0 180.0 (0 -1 1)[2 1 1]↓ 90.0 35.264 225.0 (-1 -1 2)[1 1 1]↓ ↓ ori0=orientation.byMiller([0 0 1],[1 0 0],CS,SS)↓ volume(odf,ori0,15*degree)↓ ori1=orientation.byMiller([0 -1 1],[1 0 0],CS,SS)↓ volume(odf,ori1,15*degree)↓ ori2=orientation.byMiller([0 -1 1],[2 1 1],CS,SS)↓ volume(odf,ori2,15*degree)↓ ori3=orientation.byMiller([-1 -1 2],[1 1 1],CS,SS)↓ volume(odf,ori3,15*degree)↓	341 179 14 90.↓ ori0= volum ori1= volum ori2=	e Eul phi1 .192 .904 4.73 0612 orien e(odf orien orien	0.036 44. 44. 36. tatio ,ori0 tatio ,ori1 tatio	gles Phi 1972 9611 9754 1843 n.byEu ,15*de n.byEu n.byEu	in degre ph 18.914 180.05 179.92 225.05 uler(34 egree)↓ uler(179 egree)↓ uler(144	 i2 46 75 21 58 1.192*d 9.904*d 4.73*de	Inv.↓ 0↓ 0↓ 0↓ 0↓ 0↓ egree,0 egree,4 gree,44	.036197 4.9611* .9754*c	<u>,, ⊫o , ,</u> 2×degre degree ,	ee,18.91 ,180.075	46*degree,CS,S %degree,CS,SS)	↓ (S)↓
<pre> volume(odf,ori0,15*degree)↓ ori1=orientation.byMiller([0 0 1],[1 0 0],CS,SS)↓ volume(odf,ori0,15*degree)↓ ori1=orientation.byMiller([0 -1 1],[1 0 0],CS,SS)↓ volume(odf,ori1,15*degree)↓ ori2=orientation.byMiller([0 -1 1],[2 1 1],CS,SS)↓ volume(odf,ori2,15*degree)↓ ori3=orientation.byMiller([-1 -1 2],[1 1 1],CS,SS)↓ volume(odf,ori3,15*degree)↓</pre>	volum ori3= volum ↓ 0.0 180.0 144.7 90.0	e(odf orien e(odf 0. 45 36 45 35	,ori2 tatio ,ori3 0 .0 .264	,15*de n.byEu ,15*de 0.0 180.(180.(225.(egree)↓ uler(90 egree)↓))	.0612*d (0 (0 (0 (-	egree,3 0 1)[1 -1 1)[-1 1)[1 -1 2)	6.1843* 0 0]↓ 1 0 0]↓ 2 1 1]↓ [1 1 1]	<degree< td=""><td>,225.058</td><td>}*degree,CS,SS)</td><td>Ţ</td></degree<>	,225.058	}*degree,CS,SS)	Ţ
	volum ori1= volum ori2= volum ori3= volum	orien e(odf e(odf orien e(odf orien e(odf	tatio ,ori0 ,ori1 tatio ,ori2 tatio ,ori3	n.byMi ,15*de ,15*de n.byMi ,15*de n.byMi ,15*de	iller([(egree)↓ iller([(egree)↓ iller([(egree)↓ iller([- egree)↓) 0 1],) -1 1]) -1 1] -1 -1 2	[1 0 0] ,[1 0 0 ,[2 1 1],[1 1	,CS,SS)],CS,SS],CS,SS],CS,SS 1],CS,S	(\$\$)↑ })↑ })↑			

この部分をMTEX画面に貼り付け