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Rubycond_calc

Ruby and Samarium pressure/wavelength calculator

Manual

Ruby Tab

- Ruby $\text{Cr}^{3+}:\text{Al}_2\text{O}_3$
 - λ_0 (nm) = 694.25
 - $T(\lambda_0)$ (K) = 293.15
 - P Calibration
 - Shen 2020
 - Mao hydro 1986
 - Mao non hydro 1986
 - Dewaele 2008
 - Dorogokupets and Oganov 2007
 - $T(\lambda)$ (K) = 293.15
 - T Calibration
 - Not Used
 - Datchi 2004

Rubycond Pressure Calculator Version = 0.2.0 Release = 260301

Calculator About Calculator

Ruby $\text{Cr}^{3+}:\text{Al}_2\text{O}_3$ Samarium $\text{Sm}^{2+}:\text{SrB}_4\text{O}_7$

Initial Parameters

$\lambda_0 = 694.25$ nm $T(\lambda_0) = 293.15$ K / 20.00 °C

Parameters

$\lambda = 694.25$ nm

P = 20.00 GPa Shen 2020

$T(\lambda) = 293.15$ K / 20.00 °C Not Used

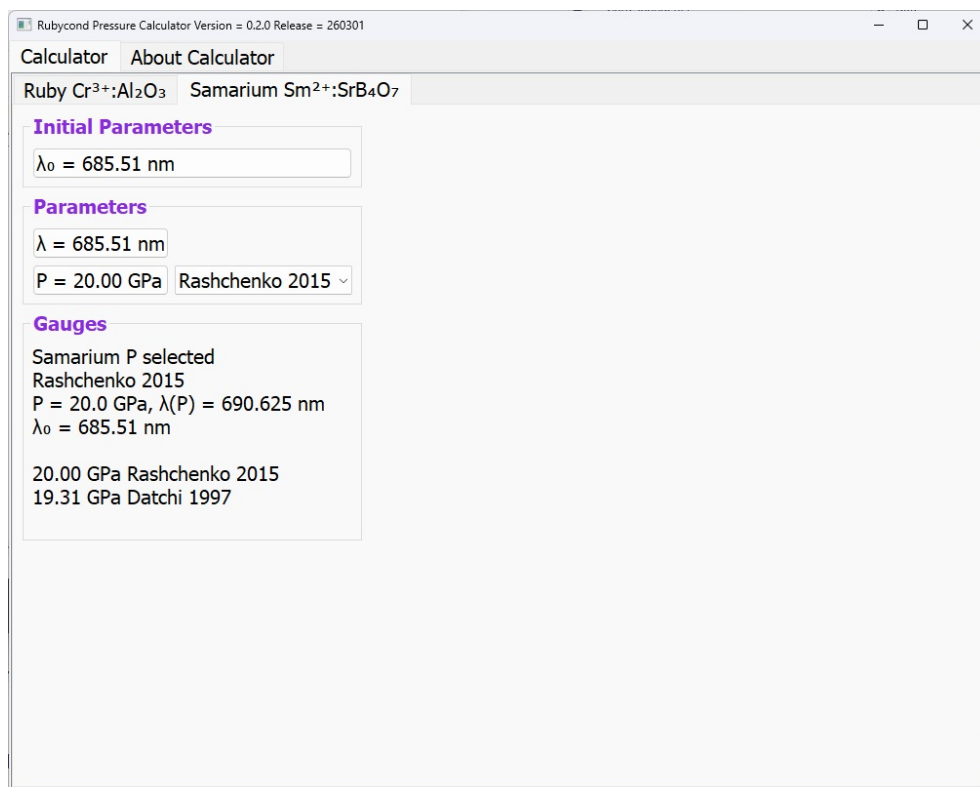
Gauges

Ruby P selected
Shen 2020
P = 20.0 GPa, $\lambda(P) = 701.275$ nm
 $\lambda_0 = 694.25$ nm, T Not Implemented

20.00 GPa Shen 2020
19.93 GPa Mao hydro 1986
19.66 GPa Mao non hydro 1986
20.30 GPa Dewaele 2008
20.12 GPa Dorogokupets and Oganov 2007

Samarium Tab

- Samarium $\text{Sm}^{2+}:\text{SrB}_4\text{O}_7$
 - λ_0 (nm) = 685.51
 - P Calibration
 - Rashchenko 2015
 - Datchi 1997



Install

Use pip to install the program **within a virtual environment (strongly recommended)**.

[Here's a short tutorial on installing a virtual environment.](#)

```
pip install rubycond_calc
```

About

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[Cellule Projet](#) @ [IMPMC](#)

License

Rubycond_calc: Tool for calibrating the spectrometer wavelengths

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Release notes

Version 0.2.0 Release 260301: First release