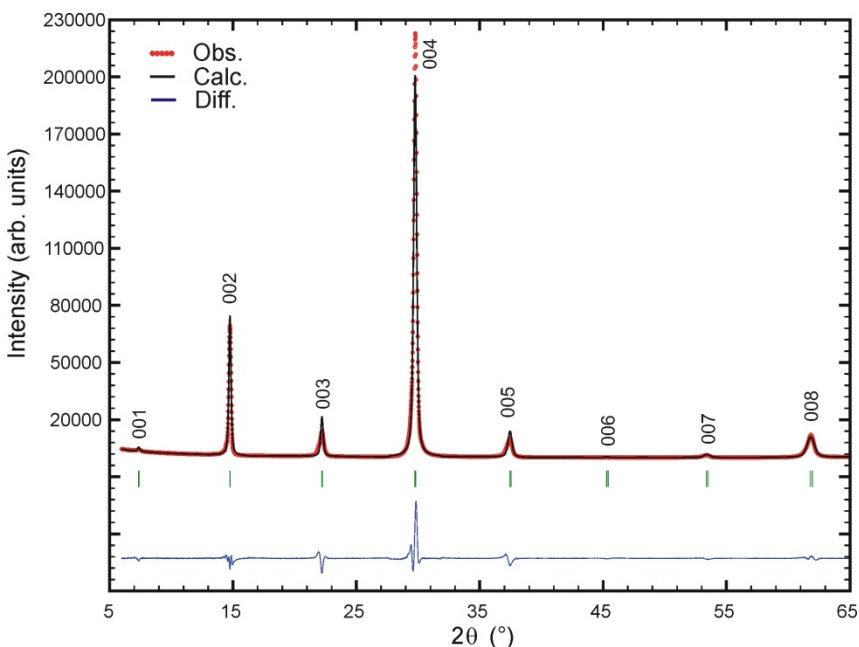


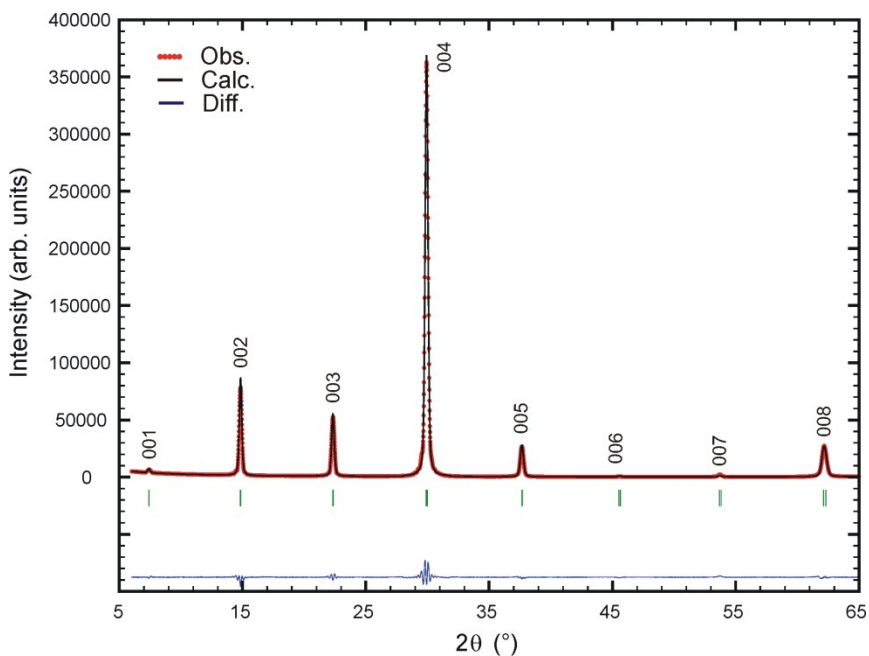
Supplementary information for the article “Modifying a charge density wave transition by modulation doping: ferecrystalline compounds  $([\text{Sn}_{1-x}\text{Bi}_x\text{Se}]_{1.15})_1(\text{VSe}_2)_1$  with  $0 \leq x \leq 0.66$  by M. Falmbigl, Z. Hay, J. Ditto, G. Mitchson, and D. C. Johnson.

**Table S1** Rietveld refinement results for the ferecrystalline compounds  $([\text{Sn}_{1-x}\text{Bi}_x\text{Se}]_{1.15})_1(\text{VSe}_2)_1$  with  $x = 0.06, 0.23, 0.42,$  and  $0.57$ . Space group:  $P3m1$ .

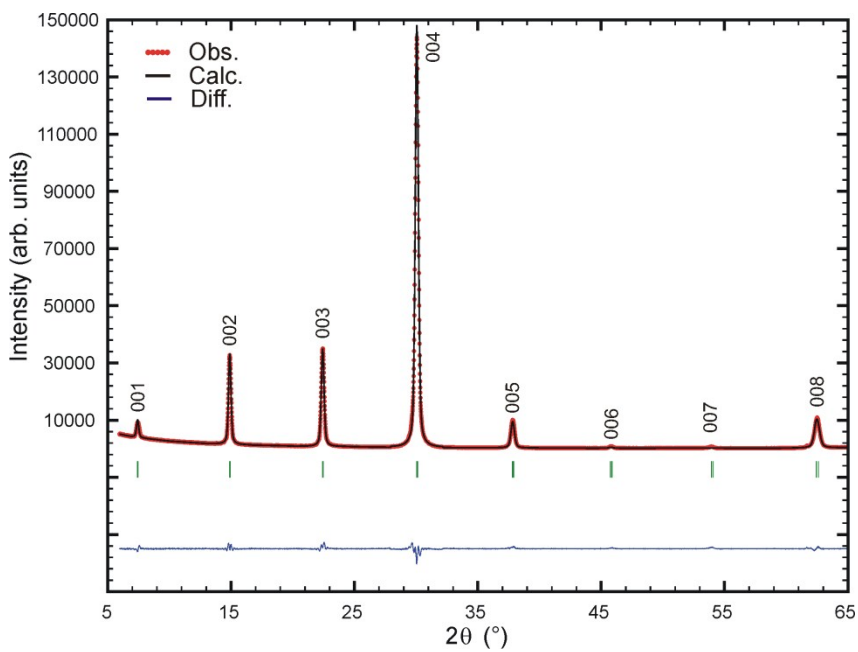
Parameter/Compound	x = 0.06	x = 0.23	x = 0.42	x = 0.57
Composition from refinement	$([\text{Sn}_{0.94}\text{Bi}_{0.06}\text{Se}]_{1.07})_1(\text{VSe}_2)_1$	$([\text{Sn}_{0.85}\text{Bi}_{0.15}\text{Se}]_{1.10})_1(\text{VSe}_2)_1$	$([\text{Sn}_{0.60}\text{Bi}_{0.40}\text{Se}]_{1.08})_1(\text{VSe}_2)_1$	$([\text{Sn}_{0.43}\text{Bi}_{0.57}\text{Se}]_{1.05})_1(\text{VSe}_2)_1$
Composition from EPMA	$([\text{Sn}_{0.94}\text{Bi}_{0.06}\text{Se}]_{1.2})_1(\text{VSe}_2)_1$	$([\text{Sn}_{0.77}\text{Bi}_{0.23}\text{Se}]_{1.12})_1(\text{VSe}_2)_1$	$([\text{Sn}_{0.58}\text{Bi}_{0.42}\text{Se}]_{1.26})_1(\text{VSe}_2)_1$	$([\text{Sn}_{0.43}\text{Bi}_{0.57}\text{Se}]_{1.23})_1(\text{VSe}_2)_1$
Radiation	Bruker D8, Cu $K_\alpha$	Bruker D8, Cu $K_\alpha$	Bruker D8, Cu $K_\alpha$	Bruker D8, Cu $K_\alpha$
$2\theta$ range (degrees)	$6 \leq 2\theta \leq 65$	$6 \leq 2\theta \leq 65$	$6 \leq 2\theta \leq 65$	$6 \leq 2\theta \leq 65$
c (nm)	1.20056(6)	1.19421(3)	1.18895(3)	1.18865(4)
Reflections in refinement	8	8	8	8
Number of variables	12	12	12	11
$R_F = \sum  F_o - F_c  / \sum F_o$	0.0301	0.0263	0.0519	0.0394
$R_I = \sum  I_o - I_c  / \sum I_o$	0.0612	0.0242	0.0243	0.0205
$R_{wP} = [\sum w_i  y_{oi} - y_{ci} ^2 / \sum w_i  y_{oi} ^2]^{1/2}$	0.165	0.0817	0.0684	0.0997
$R_p = \sum  y_{oi} - y_{ci}  / \sum  y_{oi} $	0.116	0.0514	0.0420	0.0681
$R_e = [(N - P + C) / (\sum w_i y_{oi}^2)]^{1/2}$	0.0166	0.0125	0.0177	0.0197
$\chi^2 = (R_{wP} / R_e)^2$	98.7	45.5	16.4	36.3
<b>Atom parameters</b>				
V in $1a(0)$				
Occ.	1.0	1.0	1.0	1.0
Se1 in $2c(z), z$	0.1299(1)	0.1288(1)	0.1265(1)	0.1261(1)
Occ.	1.0	1.0	1.0	1.0
Sn/Bi in $2c(z), z$	0.3709(2)	0.3740(3)	0.376(1)	0.3757(1)
Occ.	Sn1.01(2)/Bi0.06	Sn0.94(3)/Bi0.16	Sn0.65(4)/Bi0.43	Sn0.45(4)/Bi0.60
Se2 in $2c(z), z$	0.4003(4)	0.3891(5)	0.380(2)	0.3757(1)
Occ.	1.07(2)	1.10(3)	1.08(4)	1.05(4)



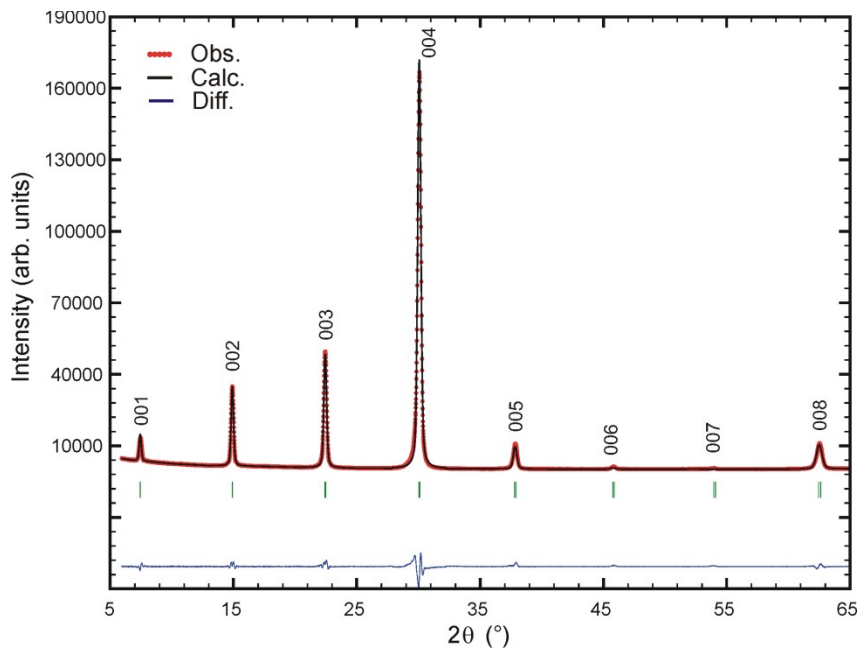
**Fig. S1** Rietveld refinement results for the ferecrystalline compound  $([\text{Sn}_{0.94}\text{Bi}_{0.06}\text{Se}]_{1+\delta})_1(\text{VSe}_2)_1$ .



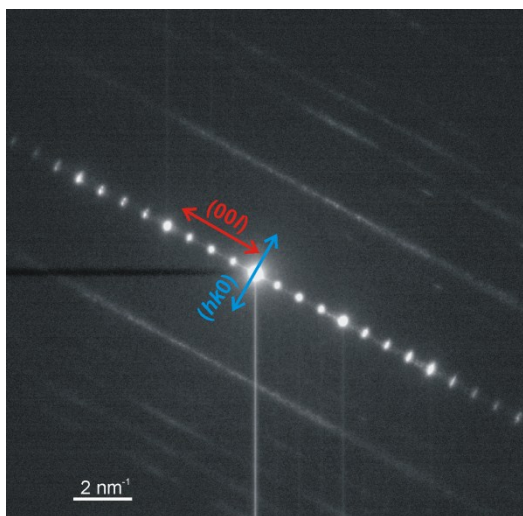
**Fig. S2** Rietveld refinement results for the ferecrystalline compound  $([\text{Sn}_{0.77}\text{Bi}_{0.23}\text{Se}]_{1+\delta})_1(\text{VSe}_2)_1$ .



**Fig. S3** Rietveld refinement results for the ferecrystalline compound  $([\text{Sn}_{0.58}\text{Bi}_{0.42}\text{Se}]_{1+\delta})_1(\text{VSe}_2)_1$ .



**Fig. S4** Rietveld refinement results for the ferrocristalline compound  $([\text{Sn}_{0.43}\text{Bi}_{0.57}\text{Se}]_{1+\delta})_1(\text{VSe}_2)_1$ .



**Fig. S5** Electron diffraction of the ferrocristalline compound  $([\text{Sn}_{0.43}\text{Bi}_{0.57}\text{Se}]_{1+\delta})_1(\text{VSe}_2)_1$ .