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Long-range order instead of phase separation in large lattice-mismatch isovalent *A -B* systems

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40% (., F-C F). ( ) ( ) B -B (37%) B - (30%), C - C (20%), (33%) ~60%

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I. INTRODUCTION

homogeneous $A_xB_{1-x}X$ *AX BX* [1] ΔH *AX-BX* [2–5] $T<\Delta H/\Delta S$, ΔS (- -) ΔH [2–5] (≥10%) ( ).[6] [7–10] ΔH, (40%) - F- F F-C F,) [11] [1–5] ([12] [13,14] [10] B -B (37%) B - (30%) C - C (20%), ΔH (33%)

II. STRAIN RELEASE THROUGH COORDINATION NUMBER DISPROPORTIONATION

ΔH ΔH F 1 (=6) E [15] 32- [16] ( ) [7,8] F 1( ) 1( ) ΔH [17]

$$\Delta H = \Delta E_{\ D} + \Delta E_{\ } + \Delta E_{\ } \quad (1)$$

[(D)] (*AX BX*)

V_{AX} V_{BX} $A_xB_{1-x}X$ x)

$$\Delta E_{D} = [xE_{AX}(\bar{V}) + (1- x)E_{BX}(\bar{V})] - [xE_{AX}(V_{AX}) + (1- x)E_{BX}(V_{BX})]$$

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A. [7] C. D. E. , B E D , - C DE-AC36-08 28308 E , C B D E F C

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