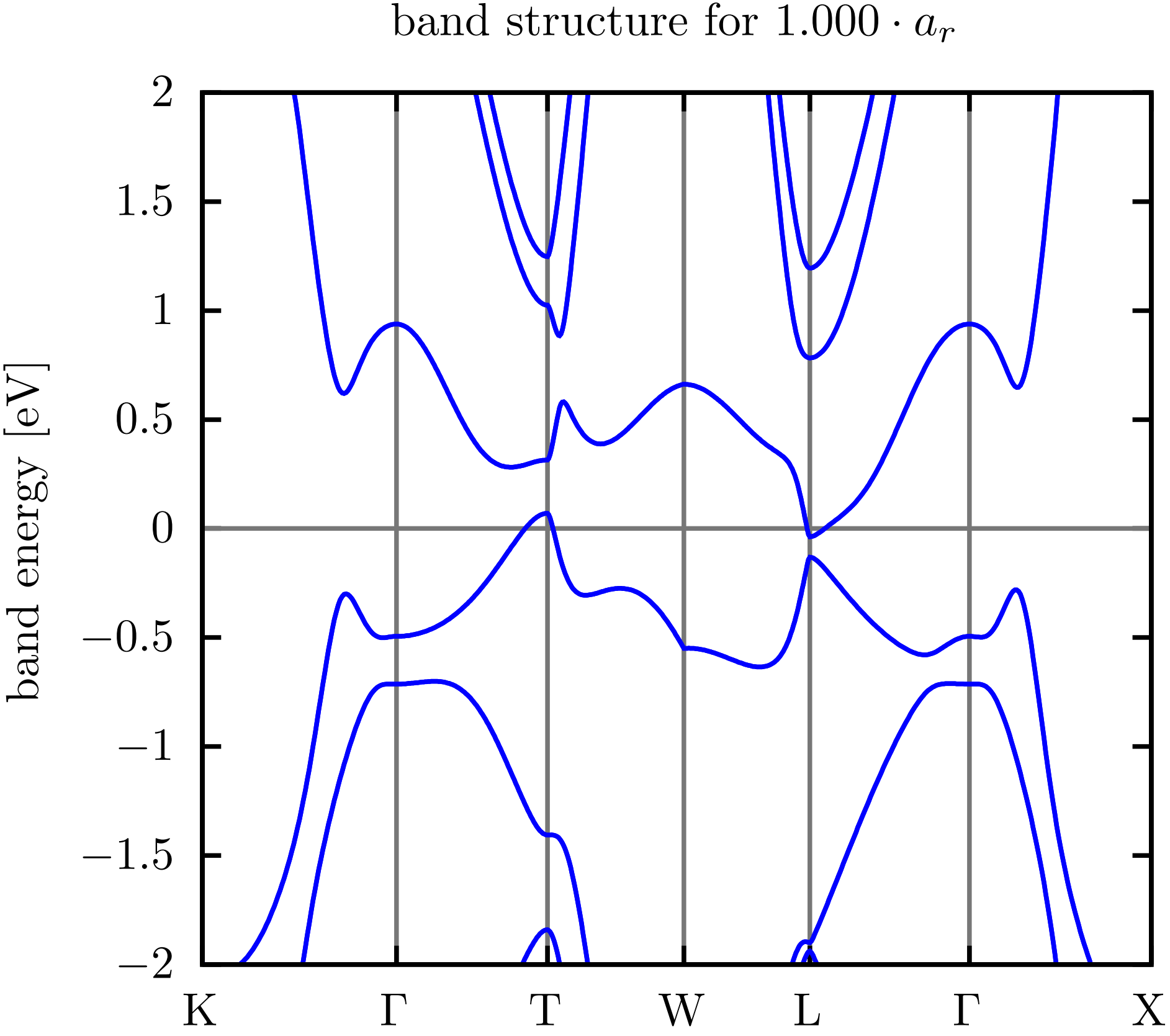
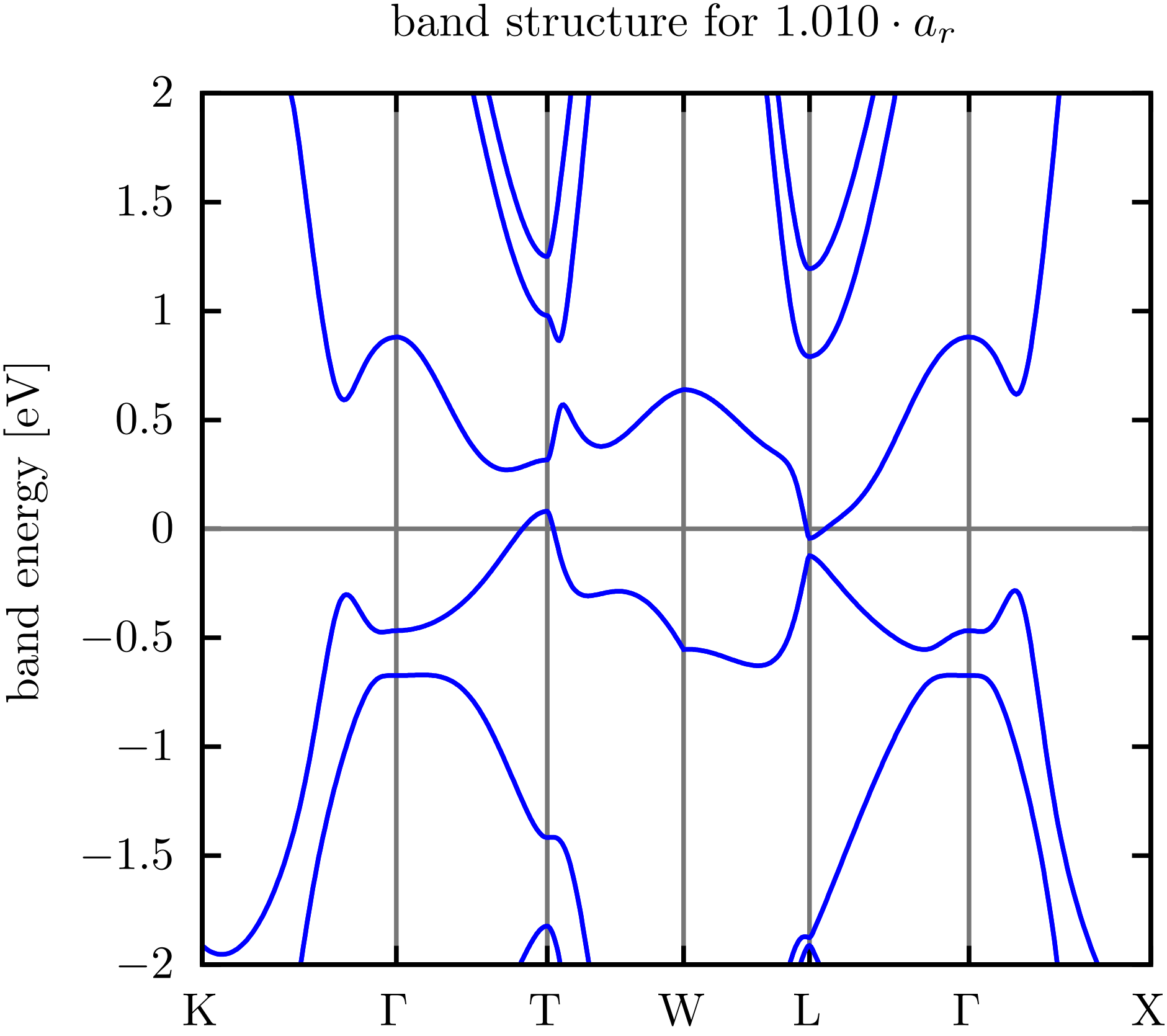
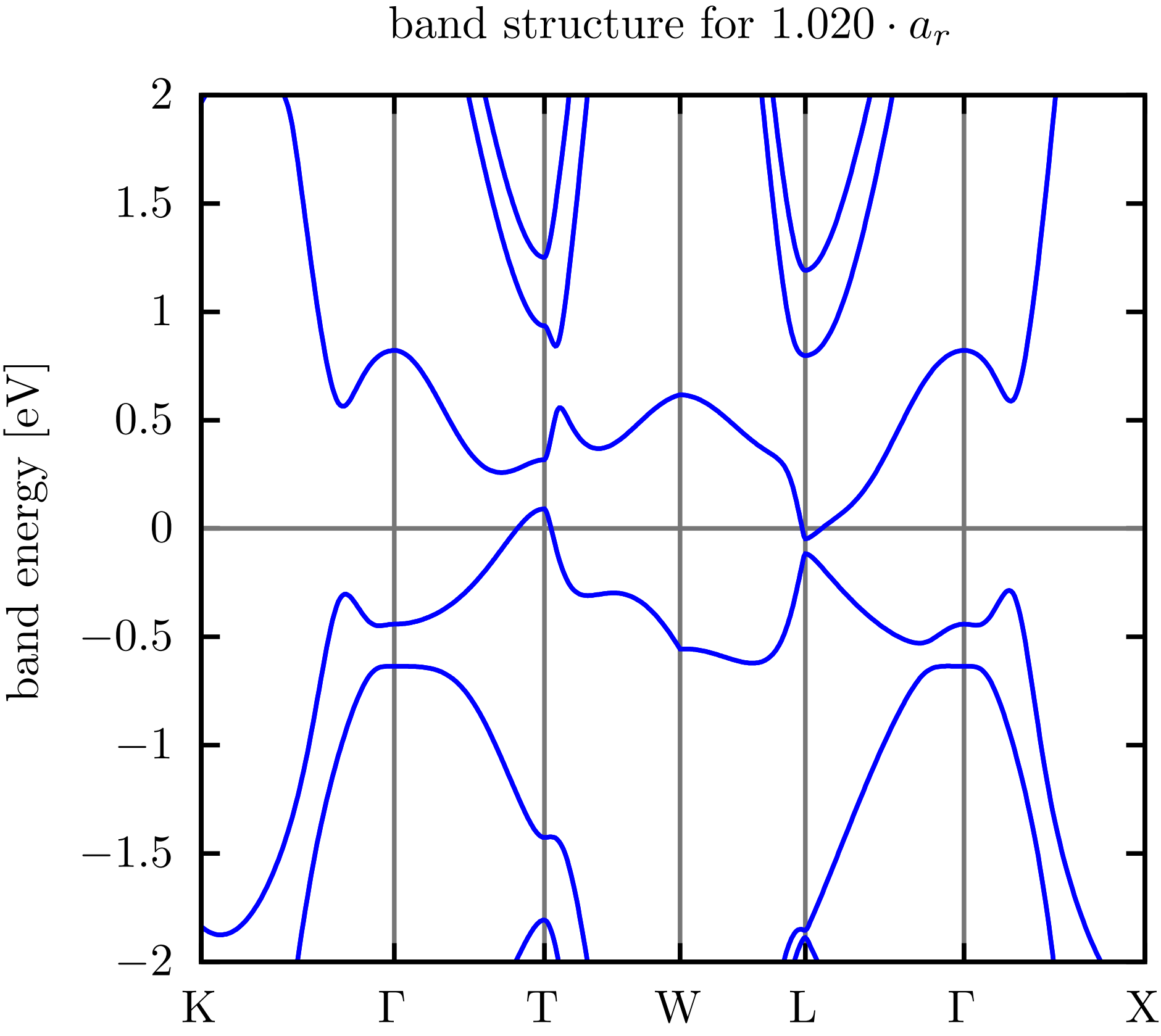
CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

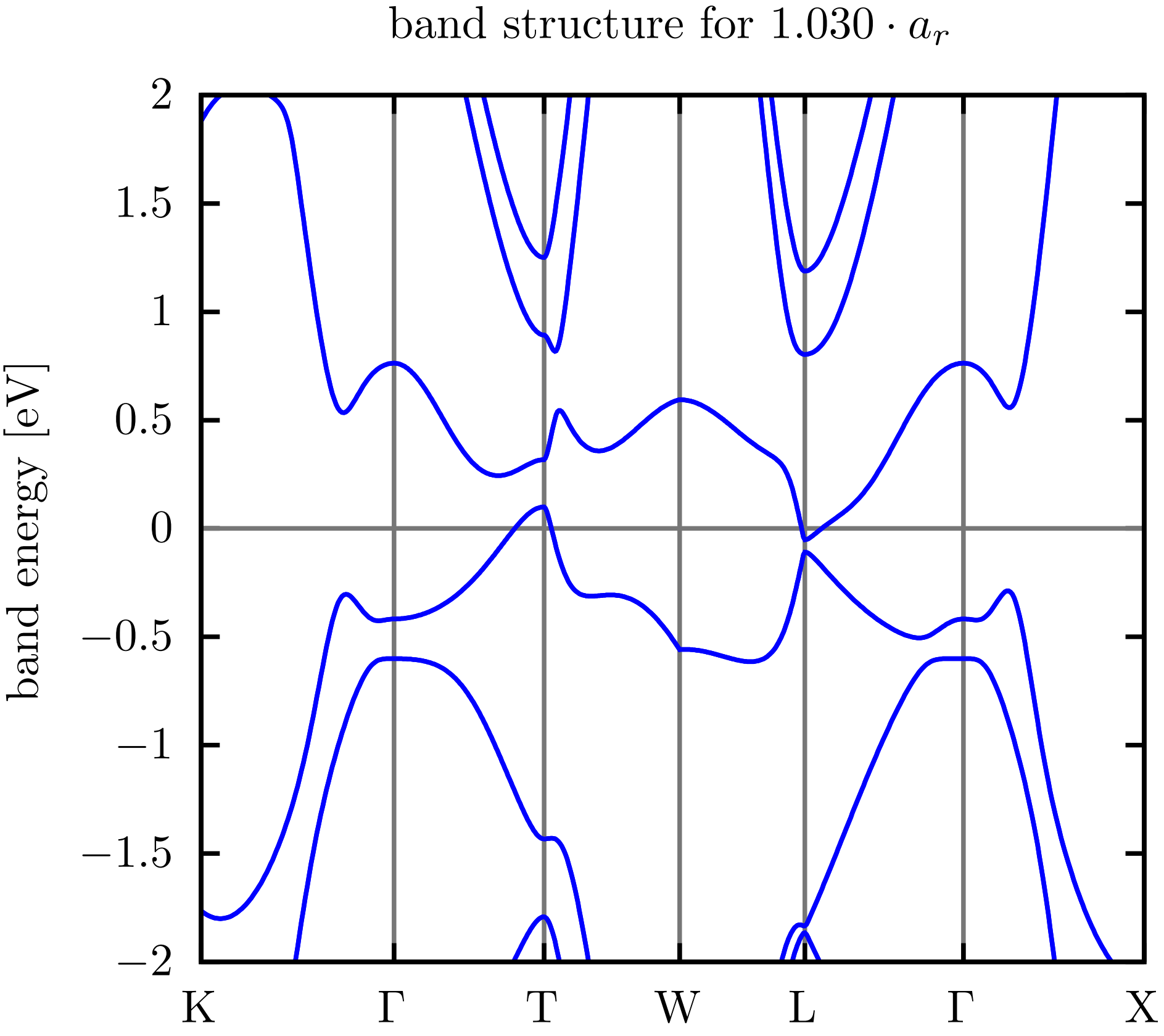
Title	Effect of strain and many-body corrections on the band inversions and topology of bismuth
Authors	König, Christian;Greer, James C.;Fahy, Stephen B.
Publication date	2021-07-15
Original Citation	König, C., Greer, J. C. and Fahy, S. (2021) 'Effect of strain and many-body corrections on the band inversions and topology of bismuth', Physical Review B, 104(3), 035127 (10pp). doi: 10.1103/PhysRevB.104.035127
Type of publication	Article (peer-reviewed)
Link to publisher's version	10.1103/PhysRevB.104.035127
Rights	© 2021, American Physical Society. All rights reserved.
Download date	2024-03-29 00:23:27
Item downloaded from	https://hdl.handle.net/10468/11705

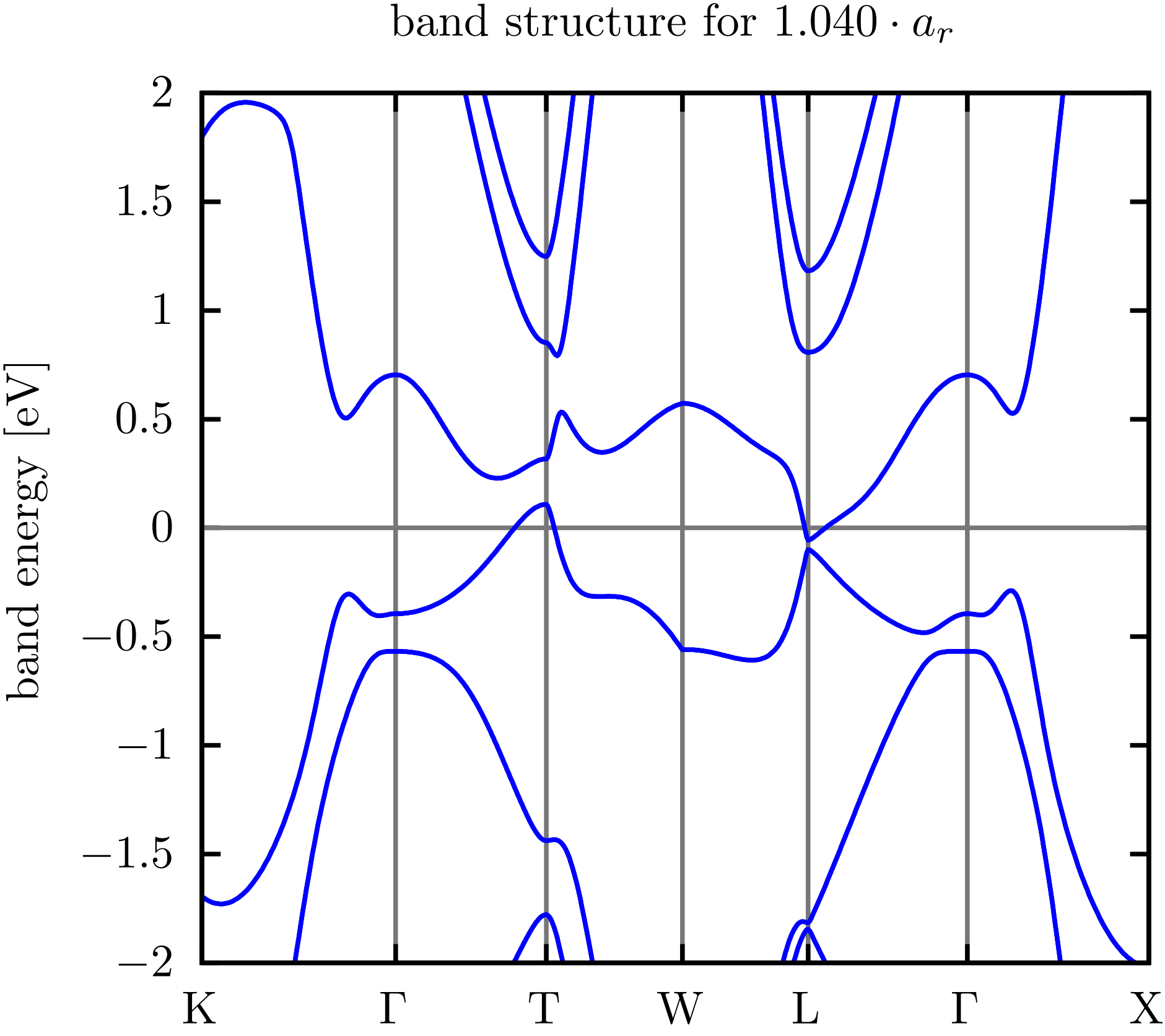
UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

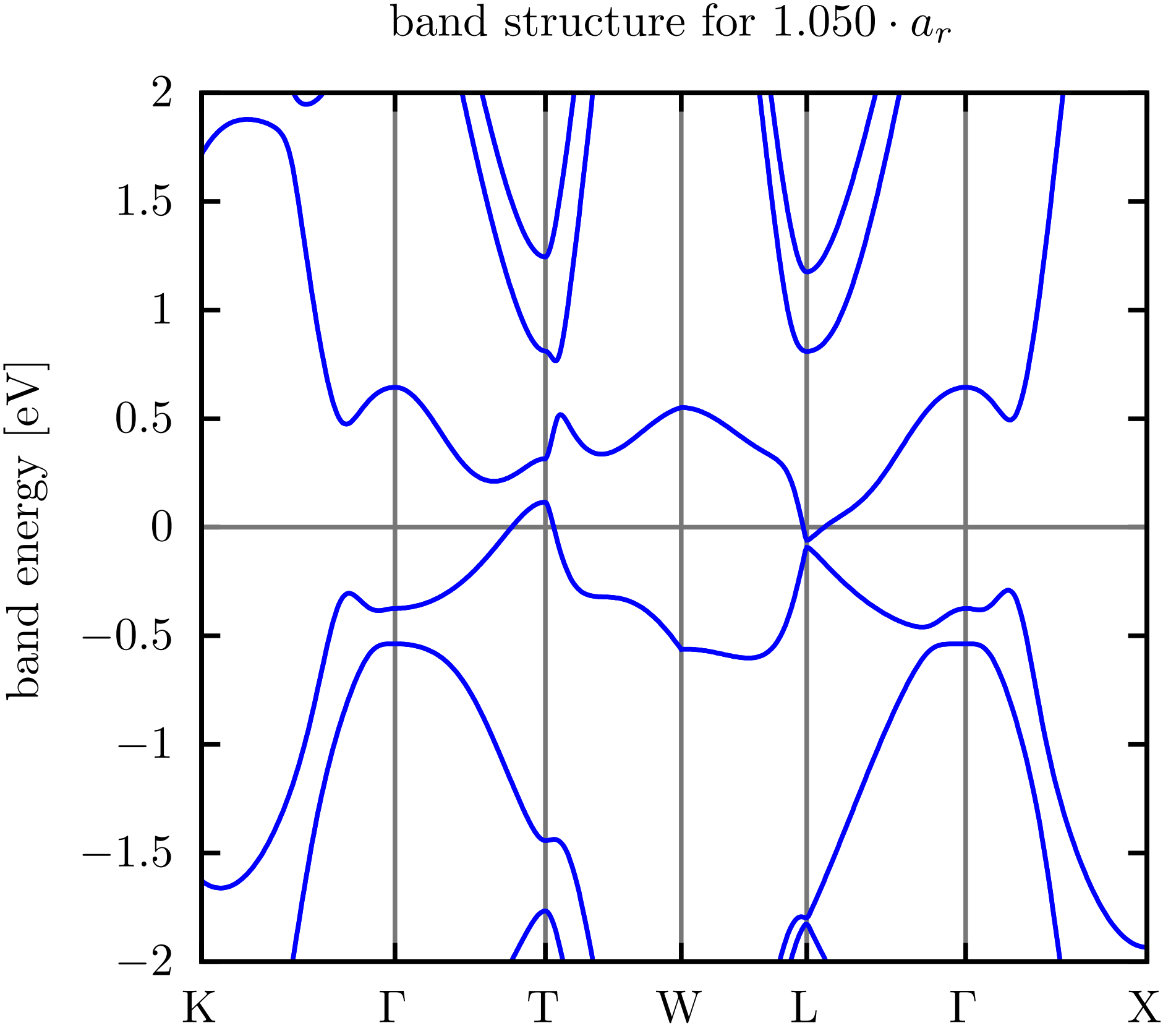

band structure for $1.000 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

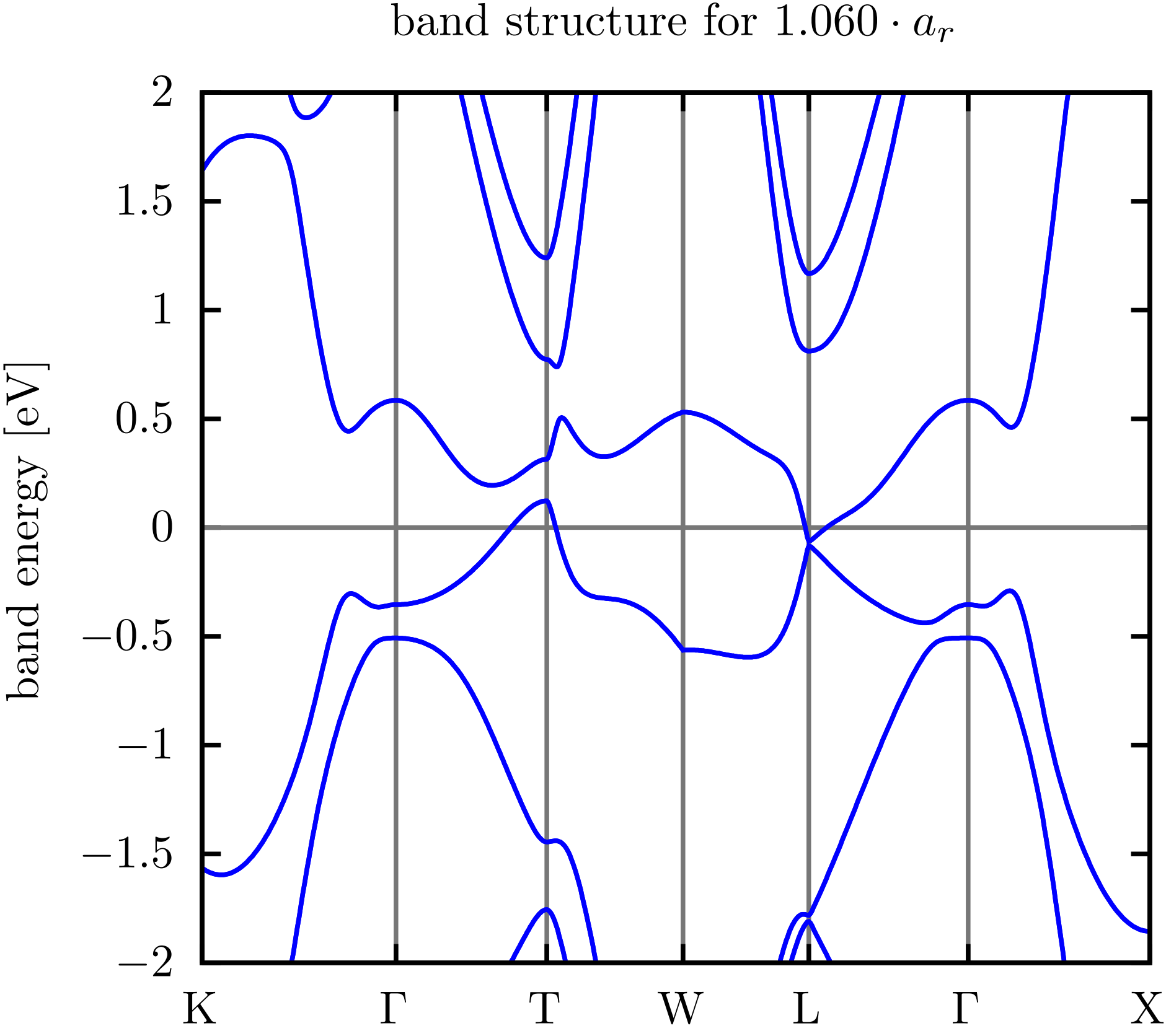

band structure for $1.010 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

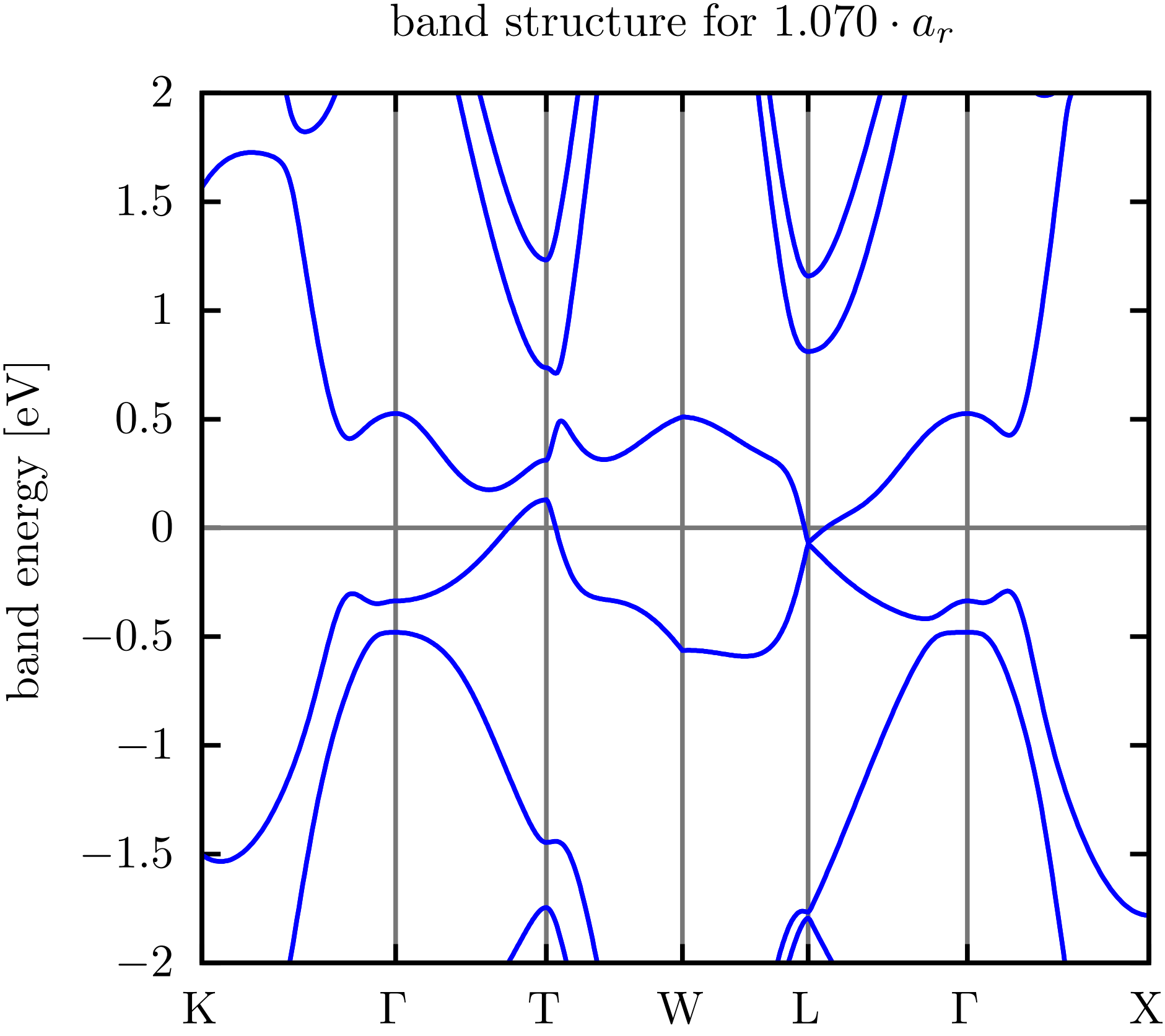

band structure for $1.020 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

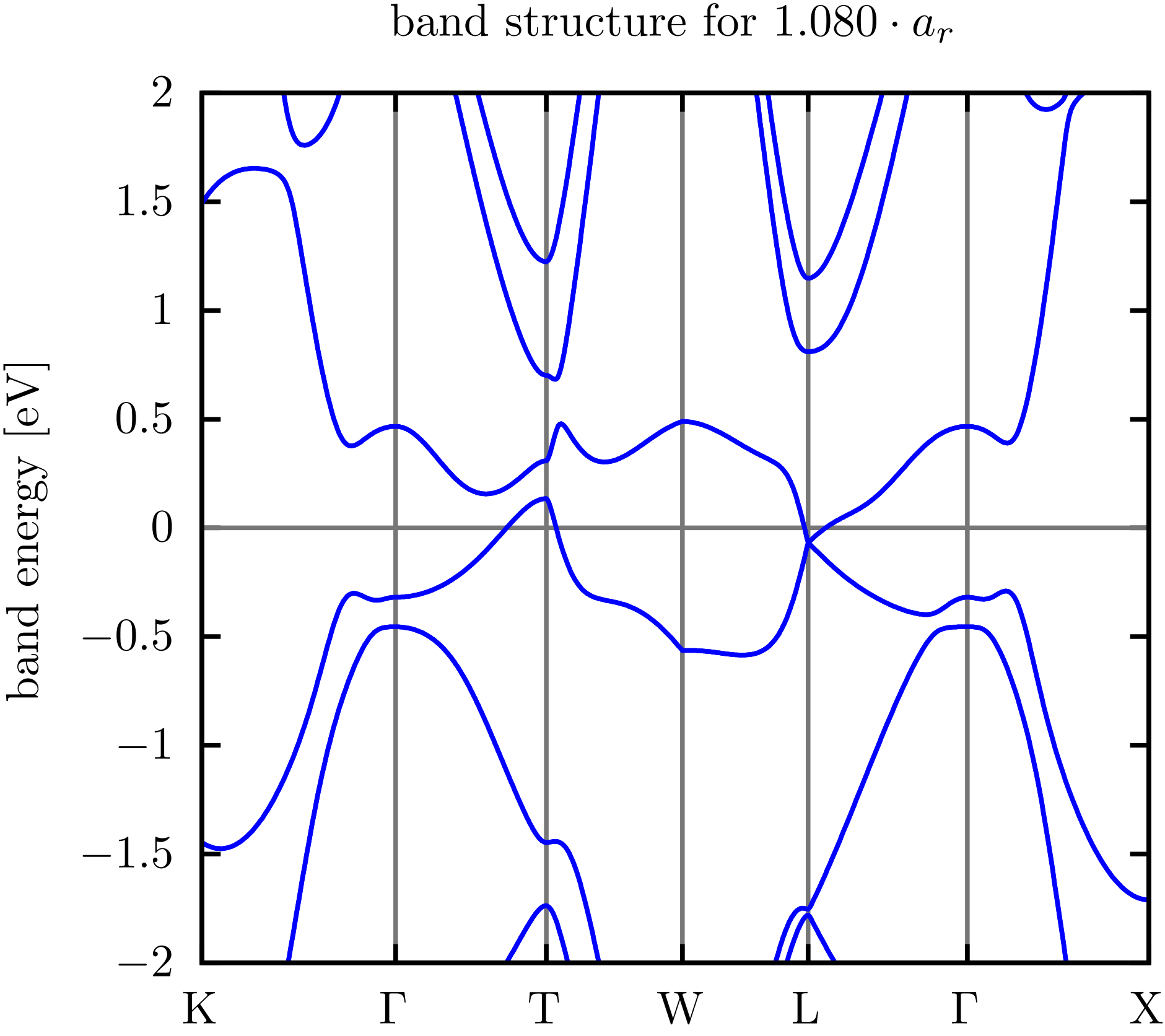

band structure for $1.030 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

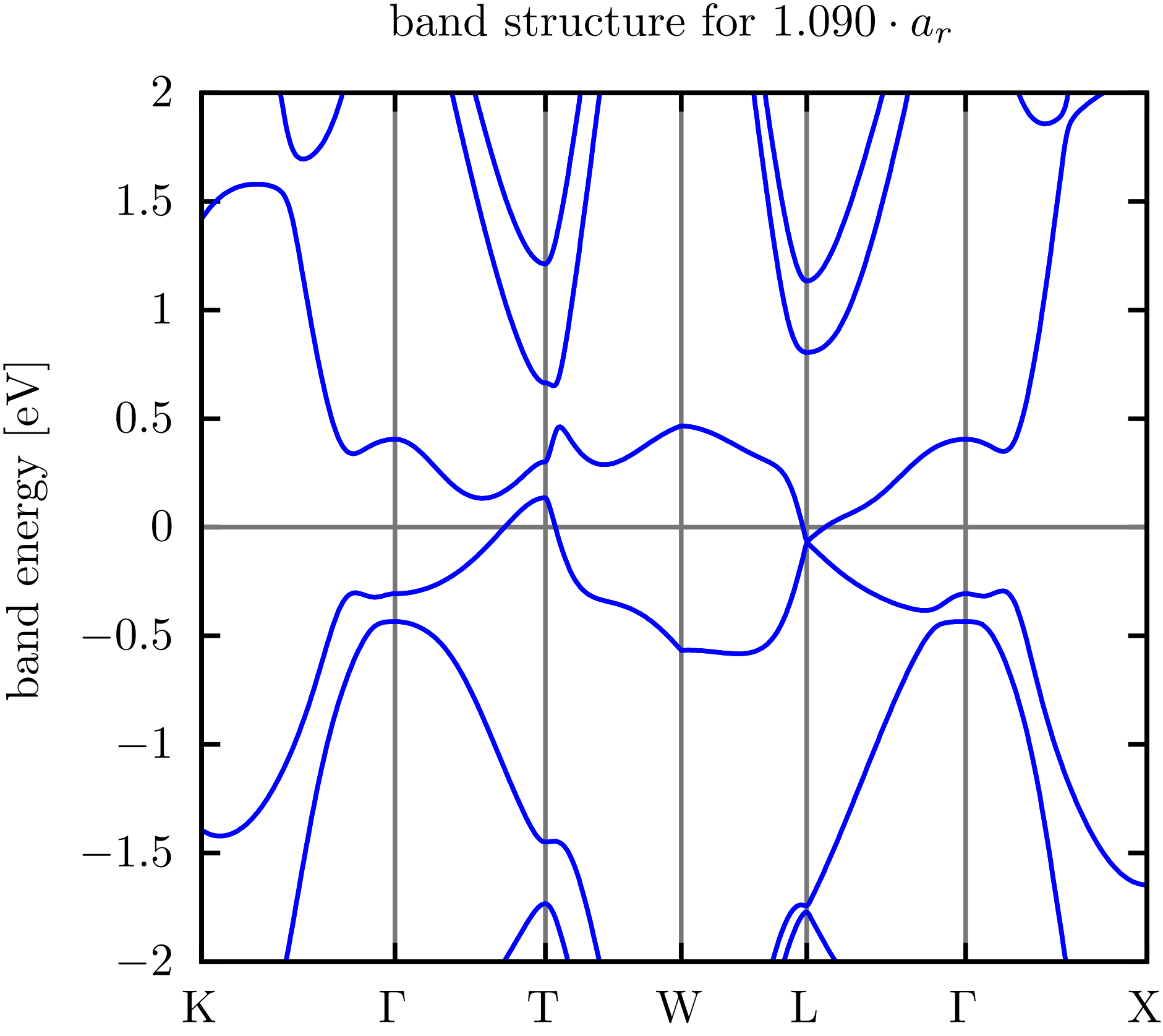

band structure for $1.040 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

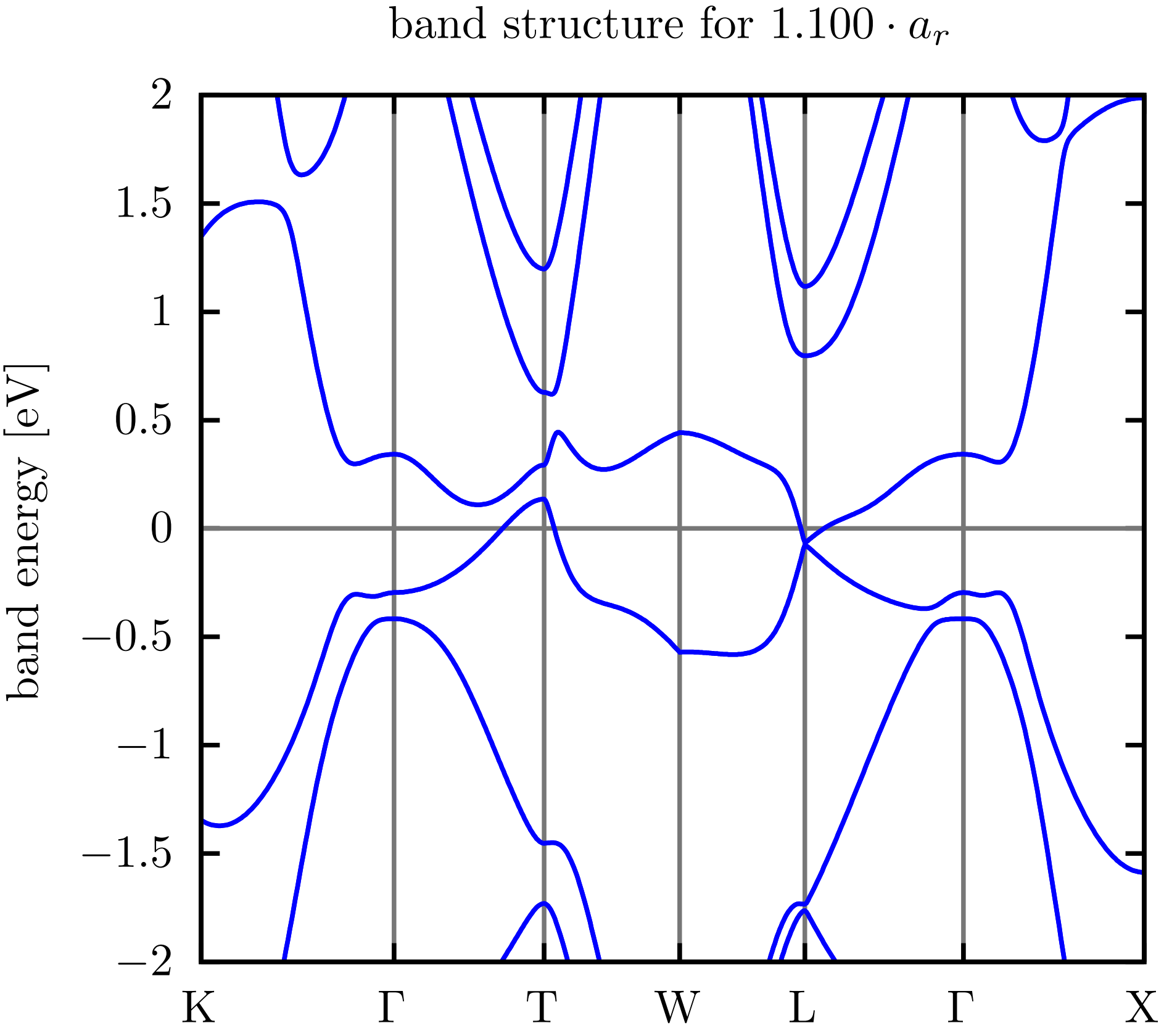

band structure for $1.050 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

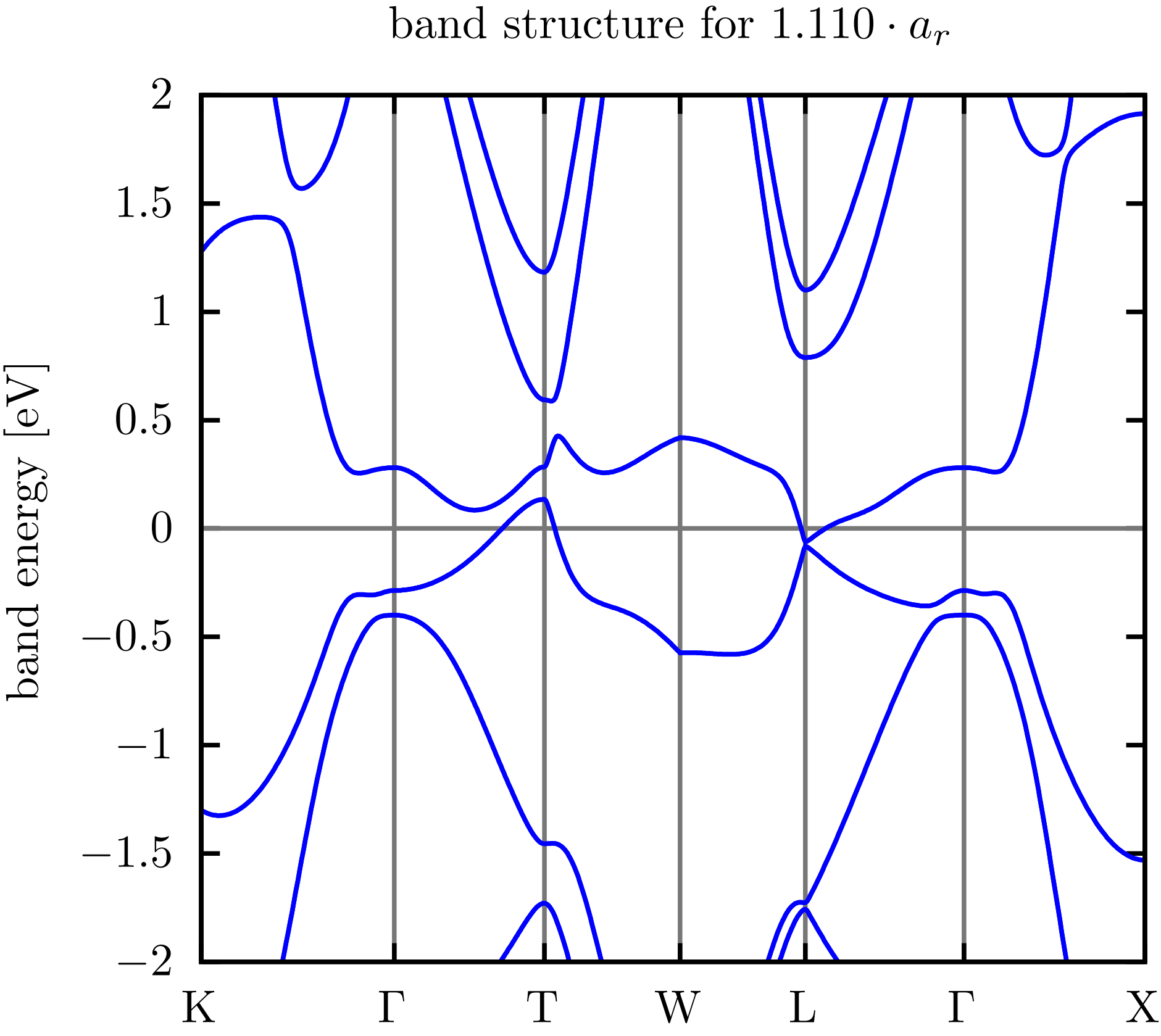

band structure for $1.060 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

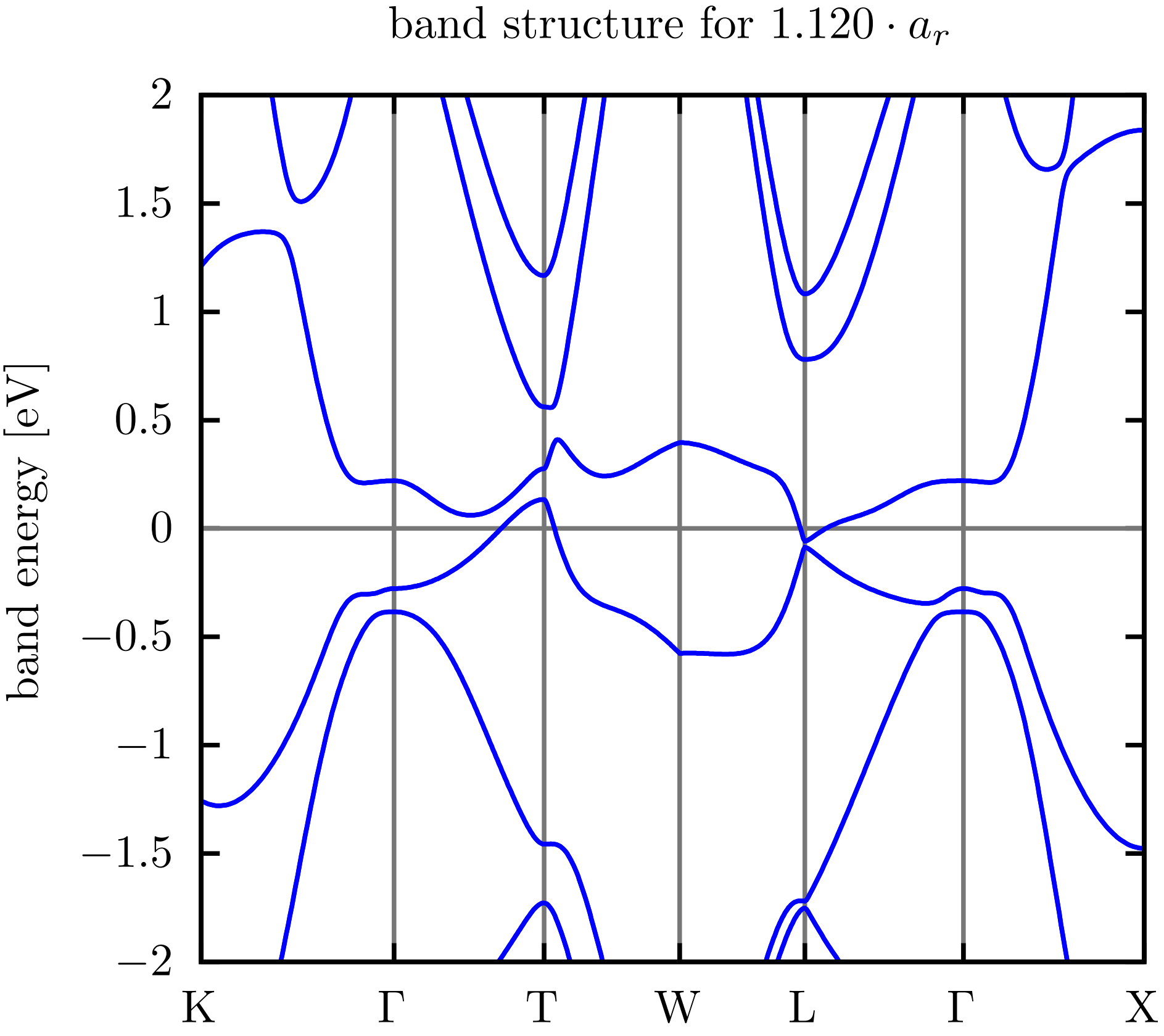

band structure for $1.070 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

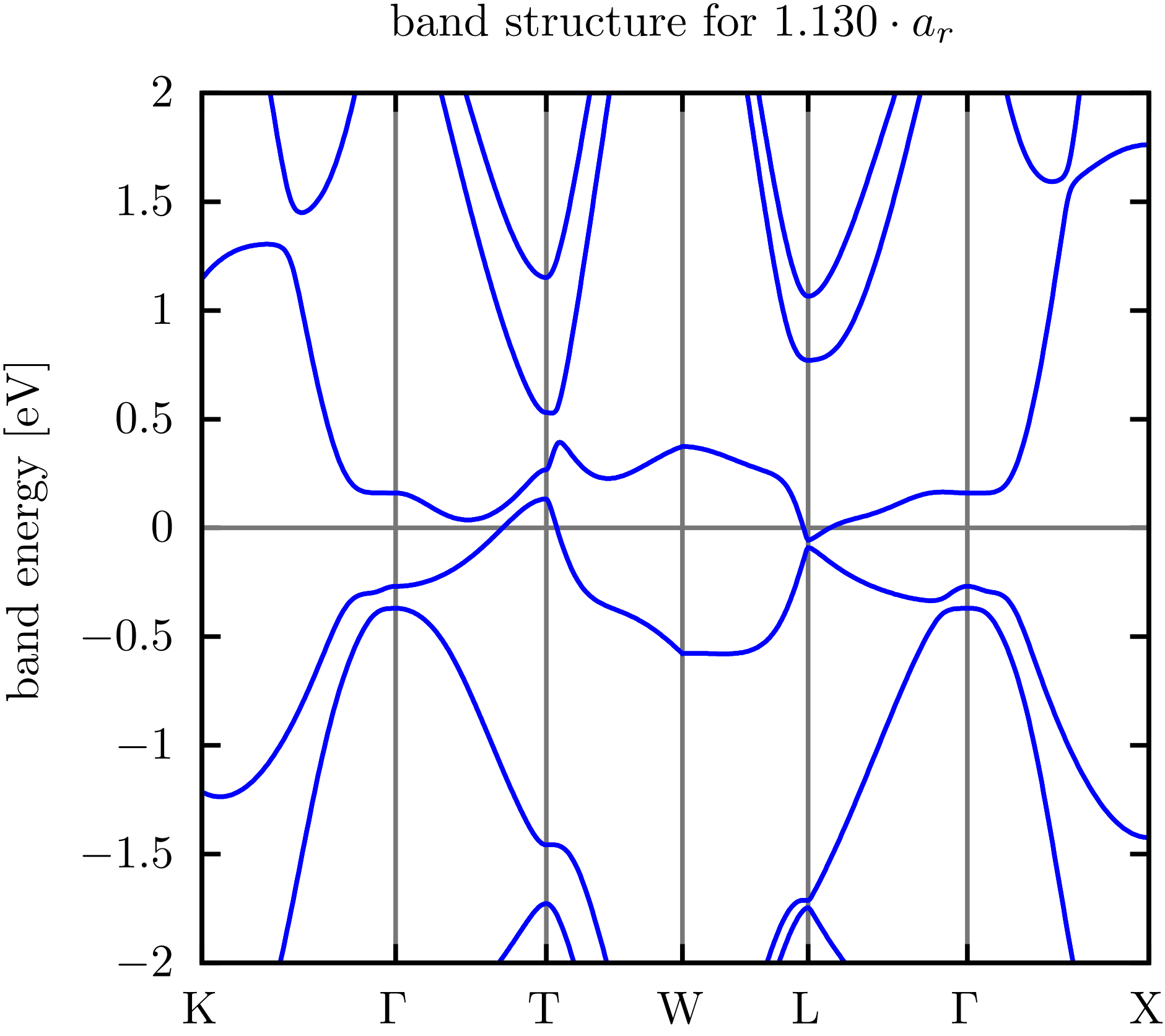

band structure for $1.080 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

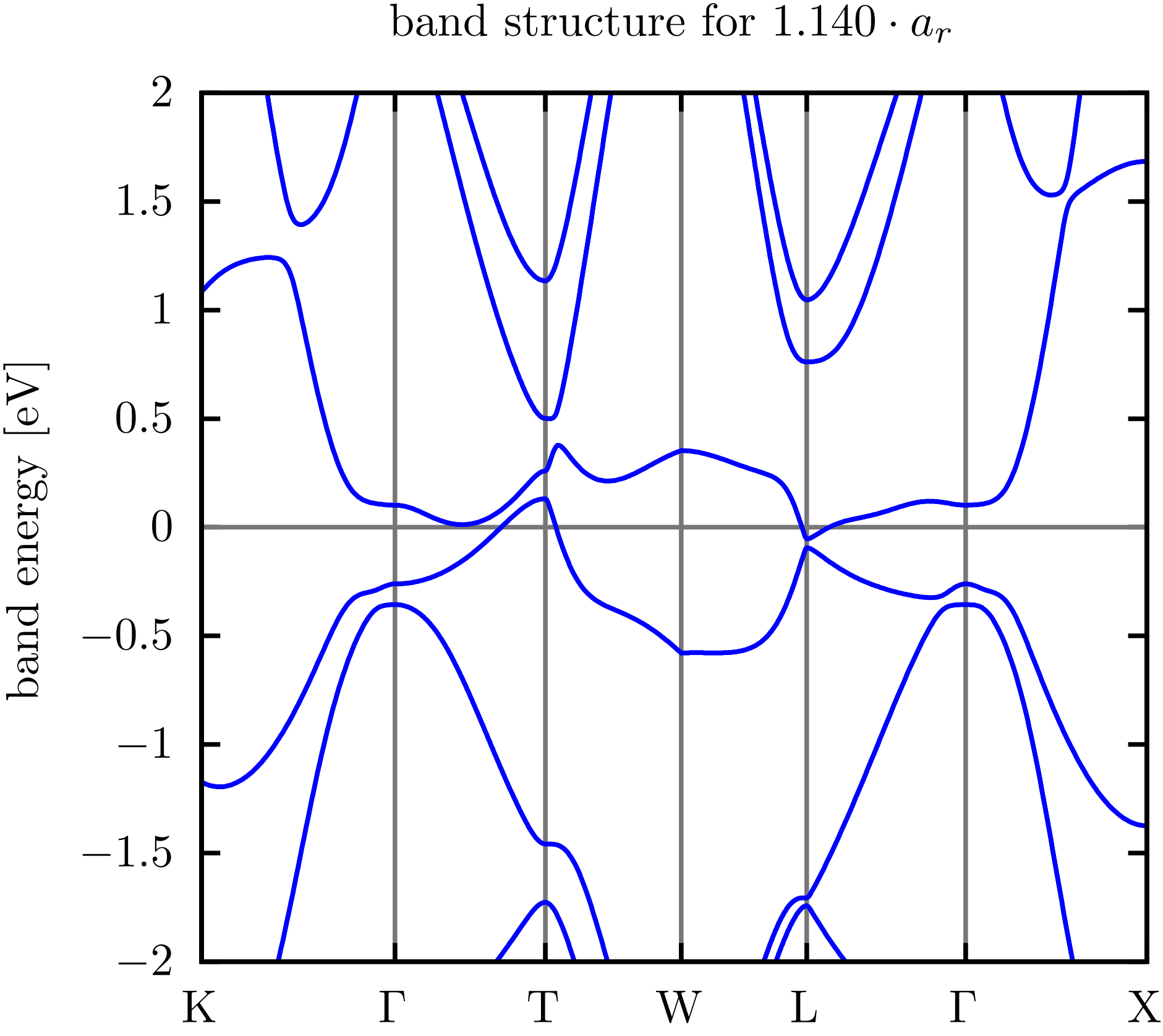

band structure for $1.090 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

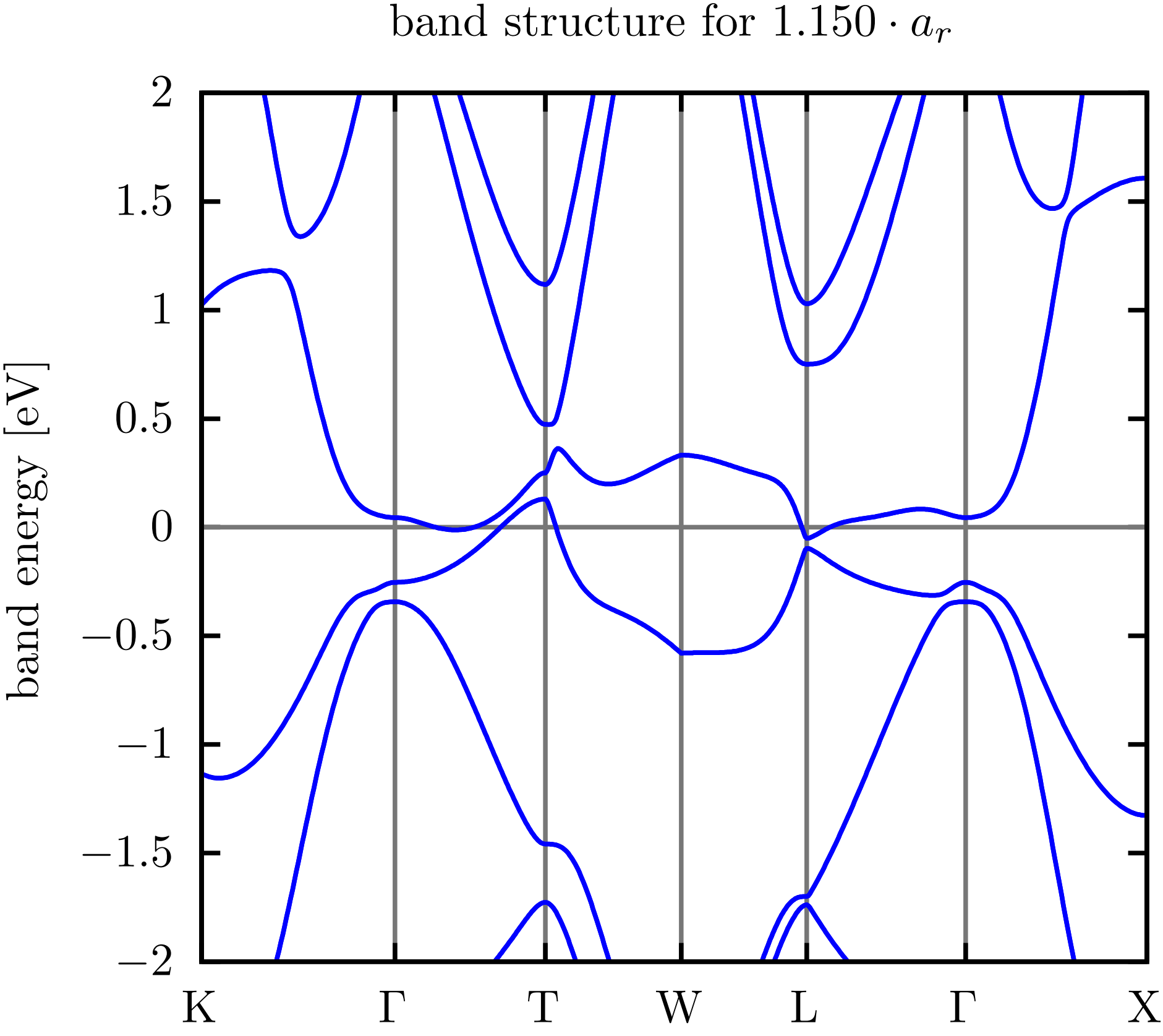

band structure for $1.100 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

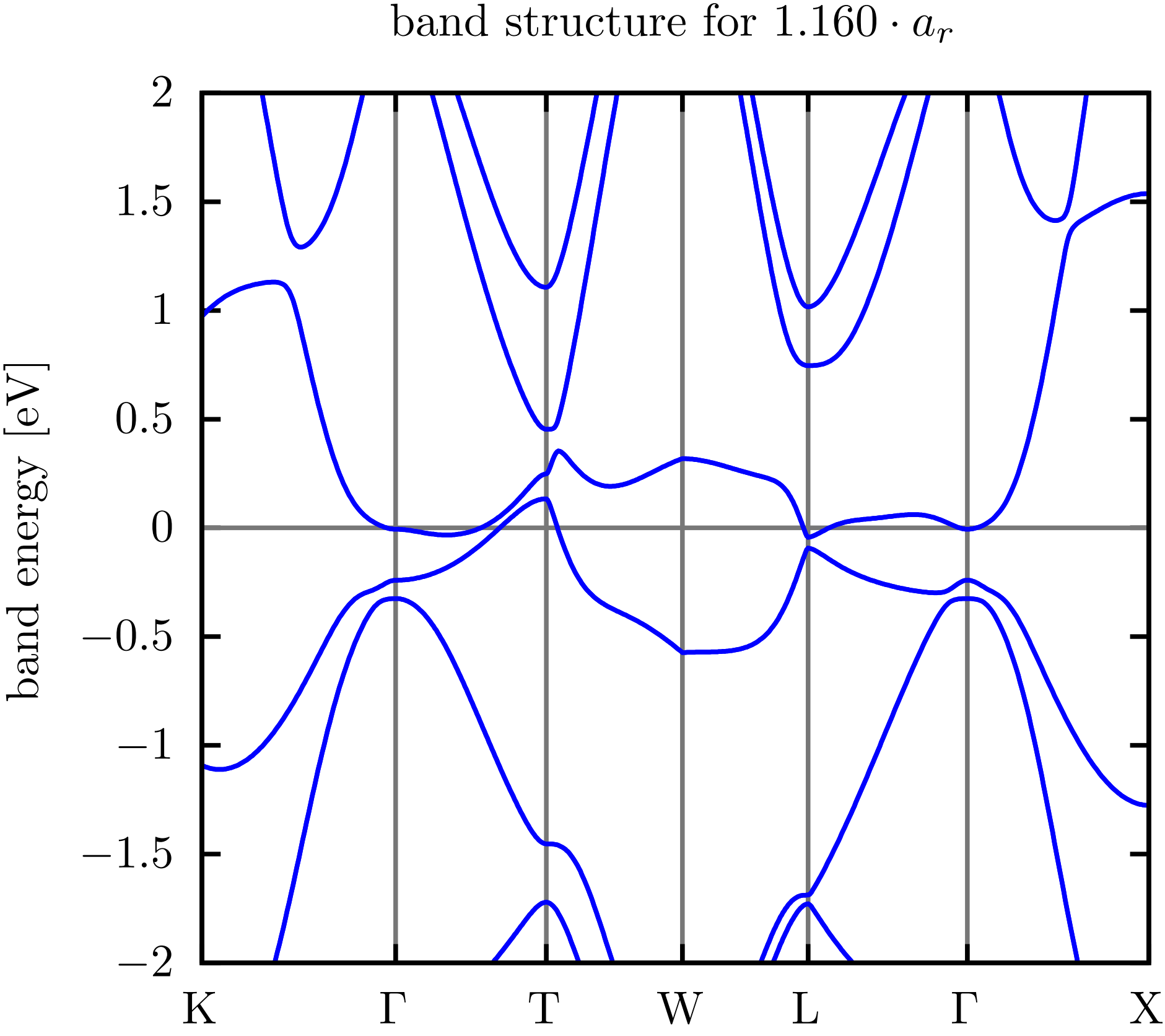

band structure for $1.110 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

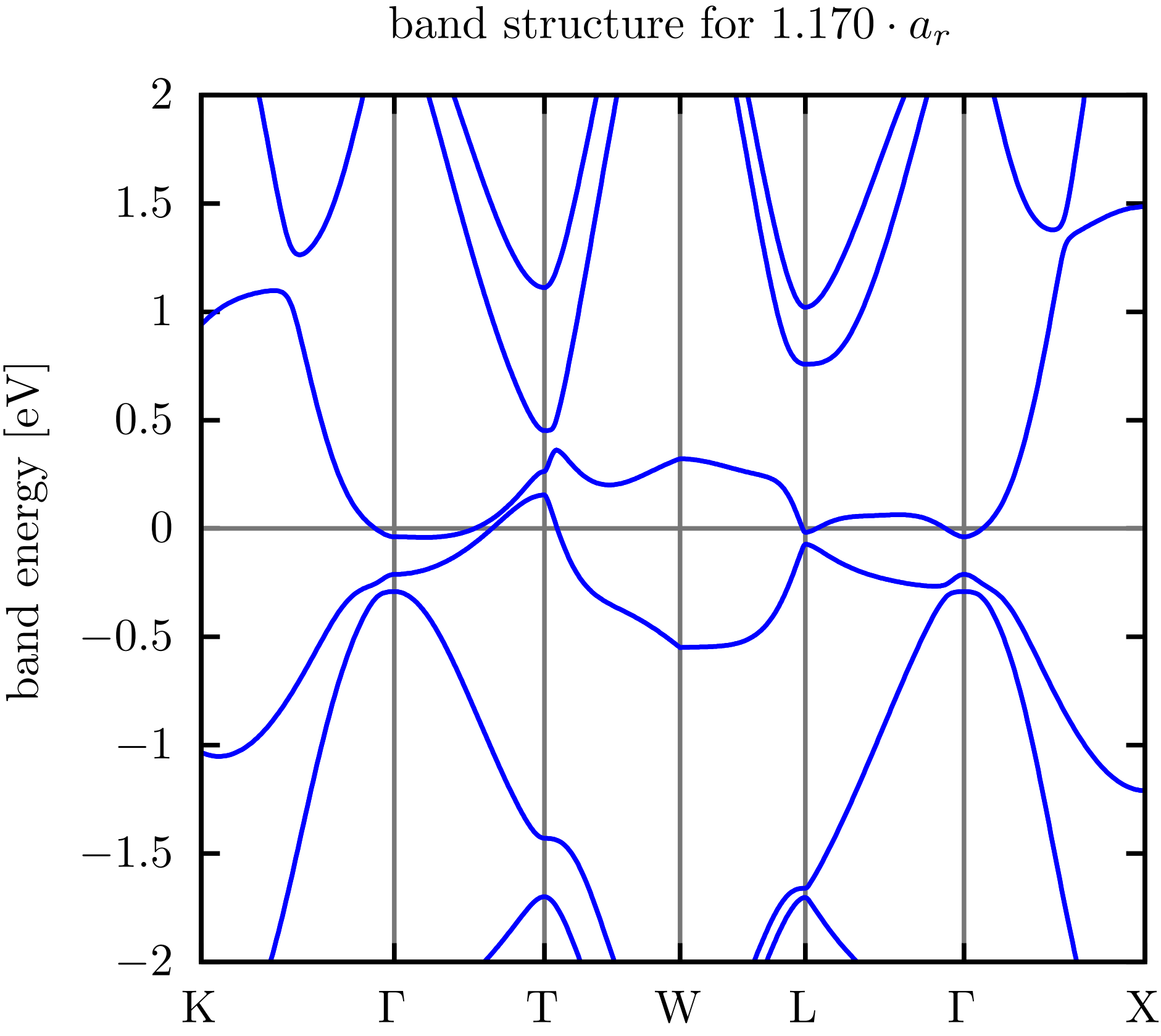

band structure for $1.120 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

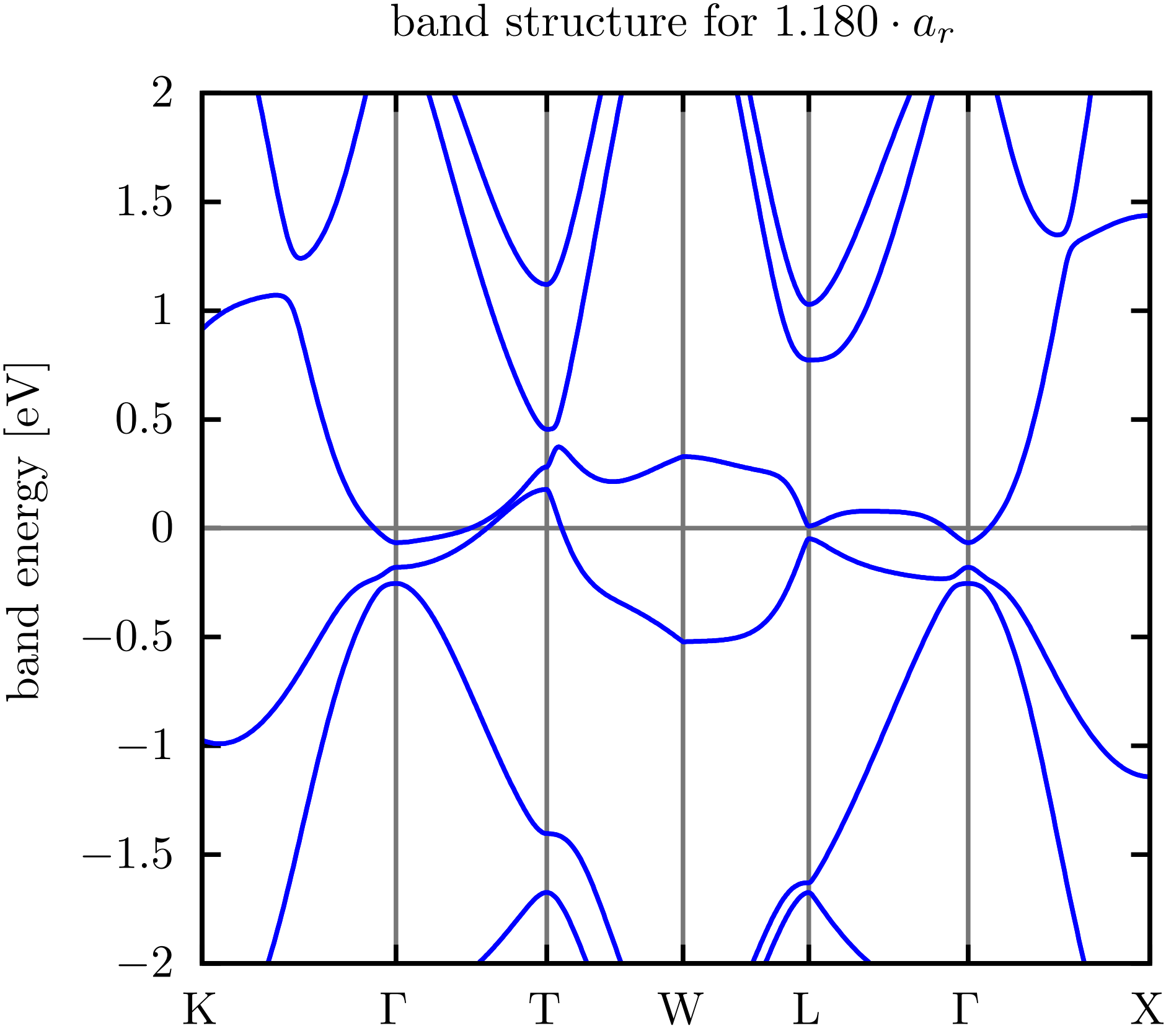

band structure for $1.130 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

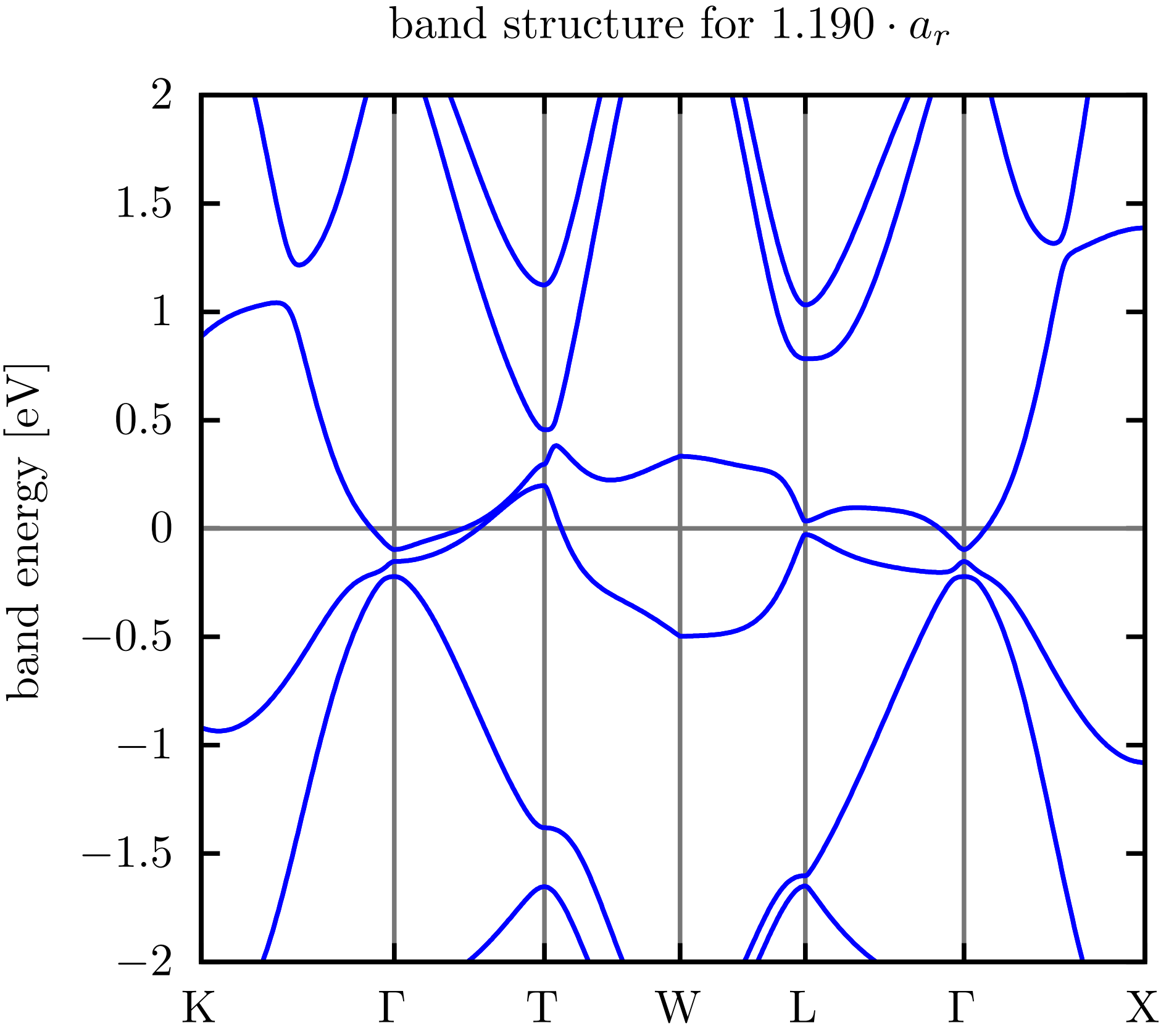

band structure for $1.140 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

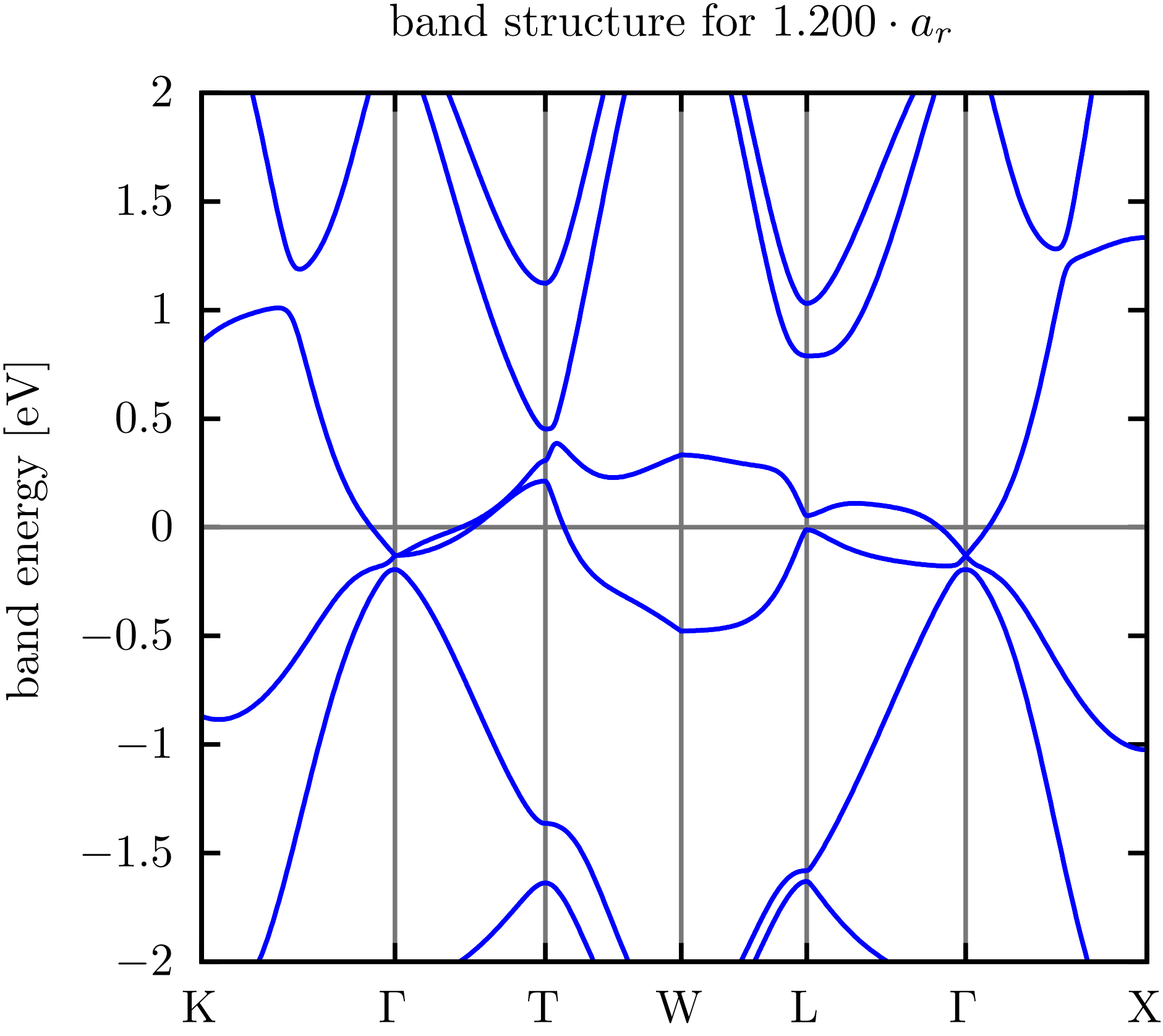

band structure for $1.150 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

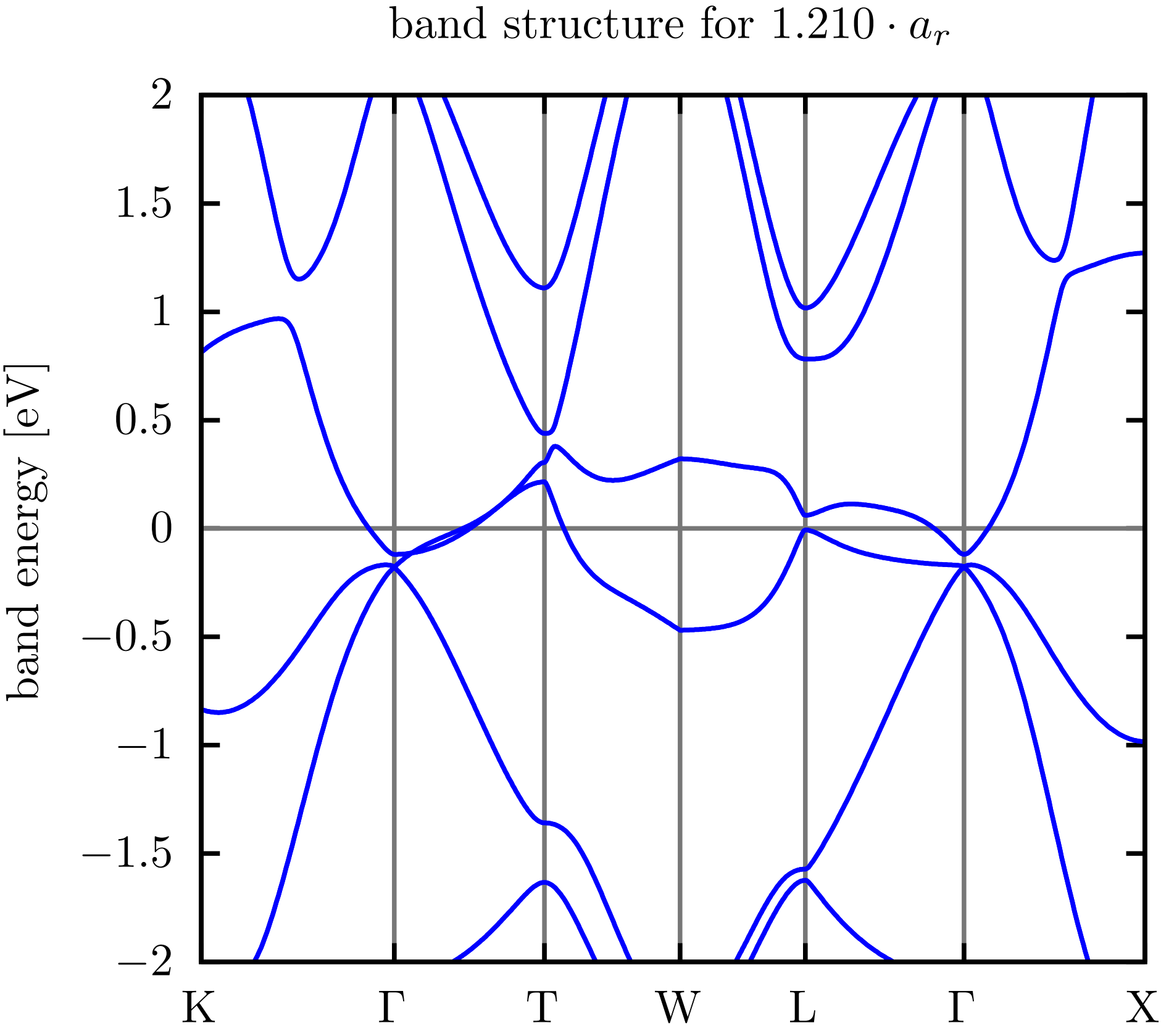

band structure for $1.160 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

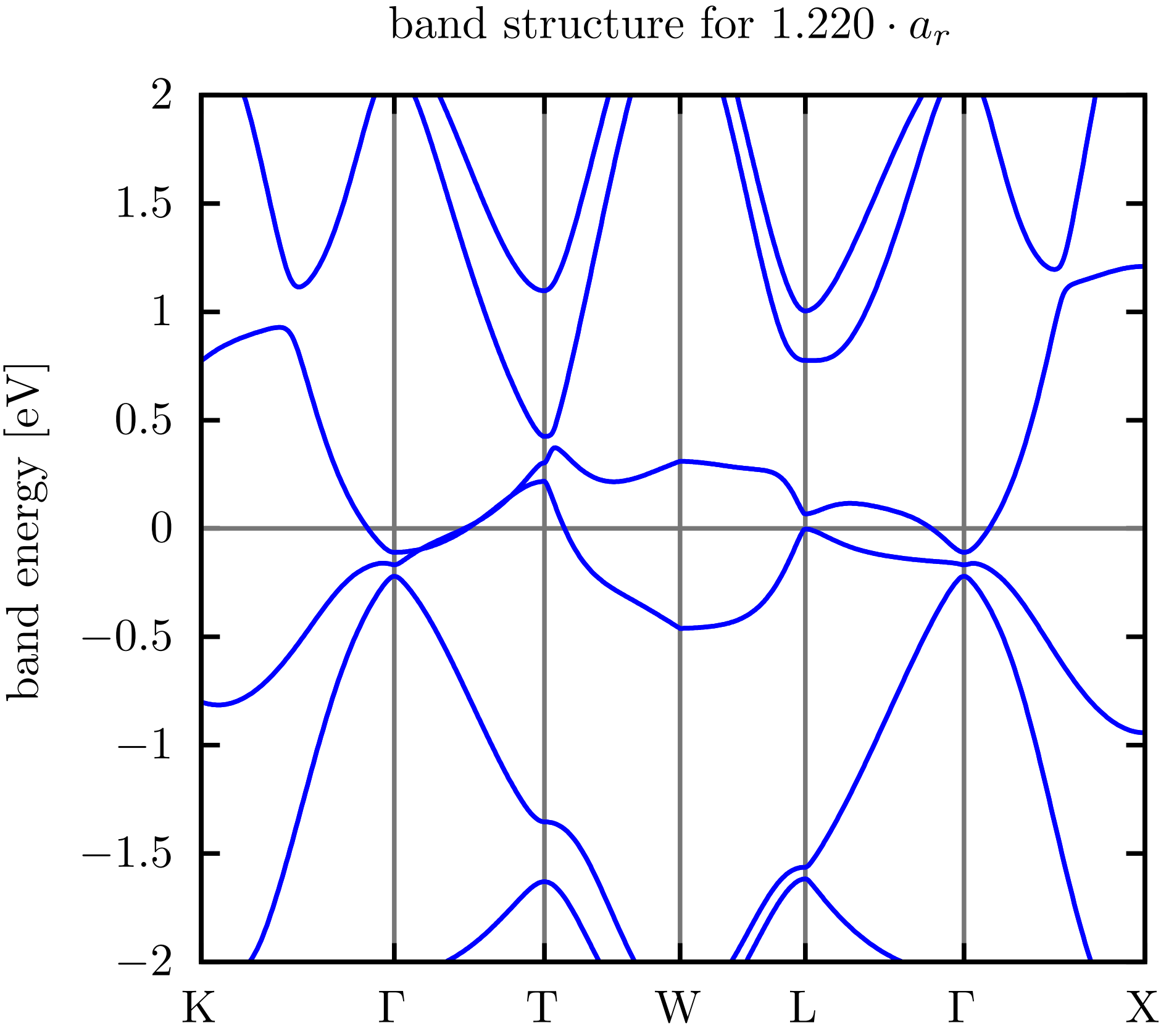

band structure for $1.170 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

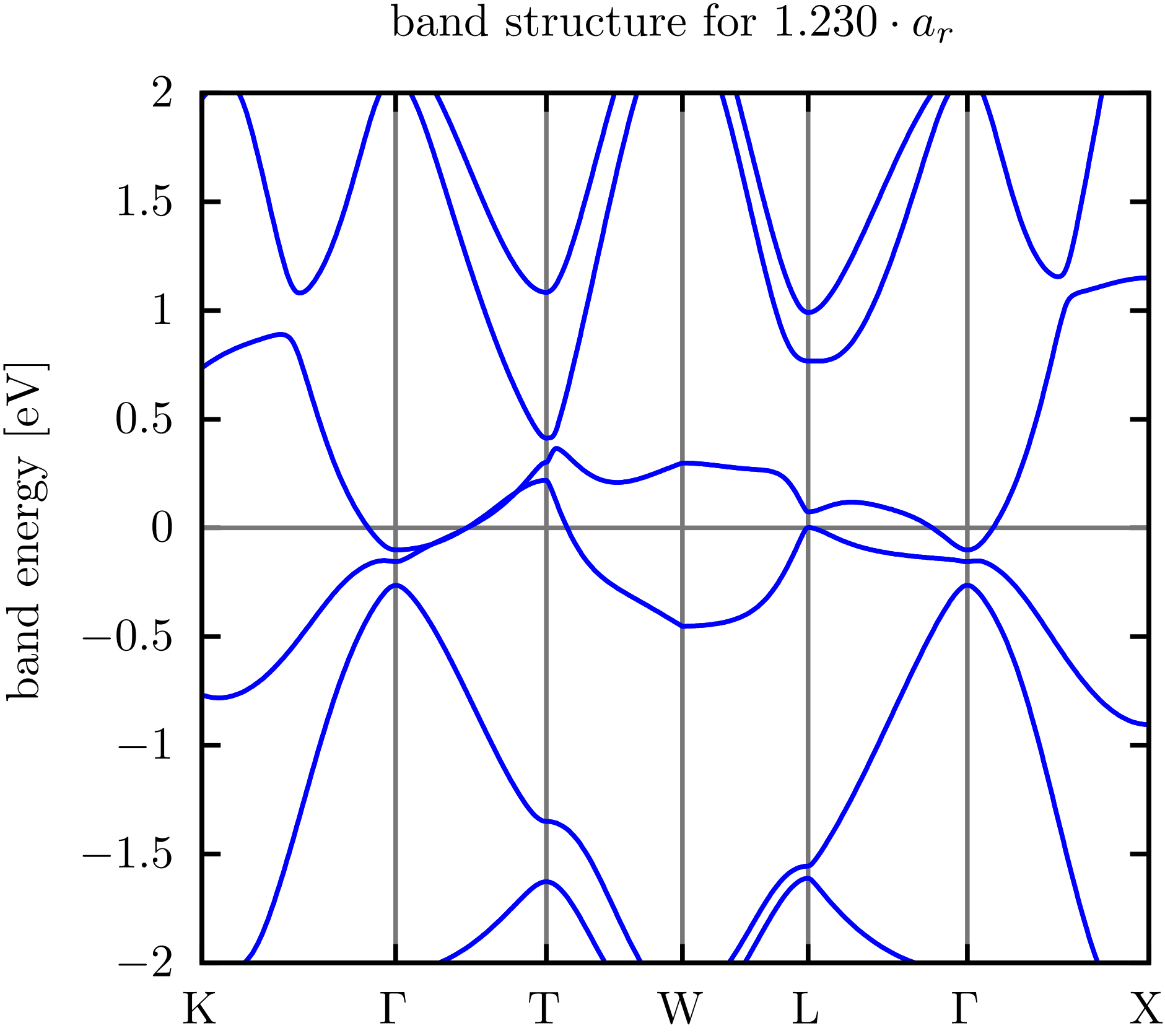

band structure for $1.180 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

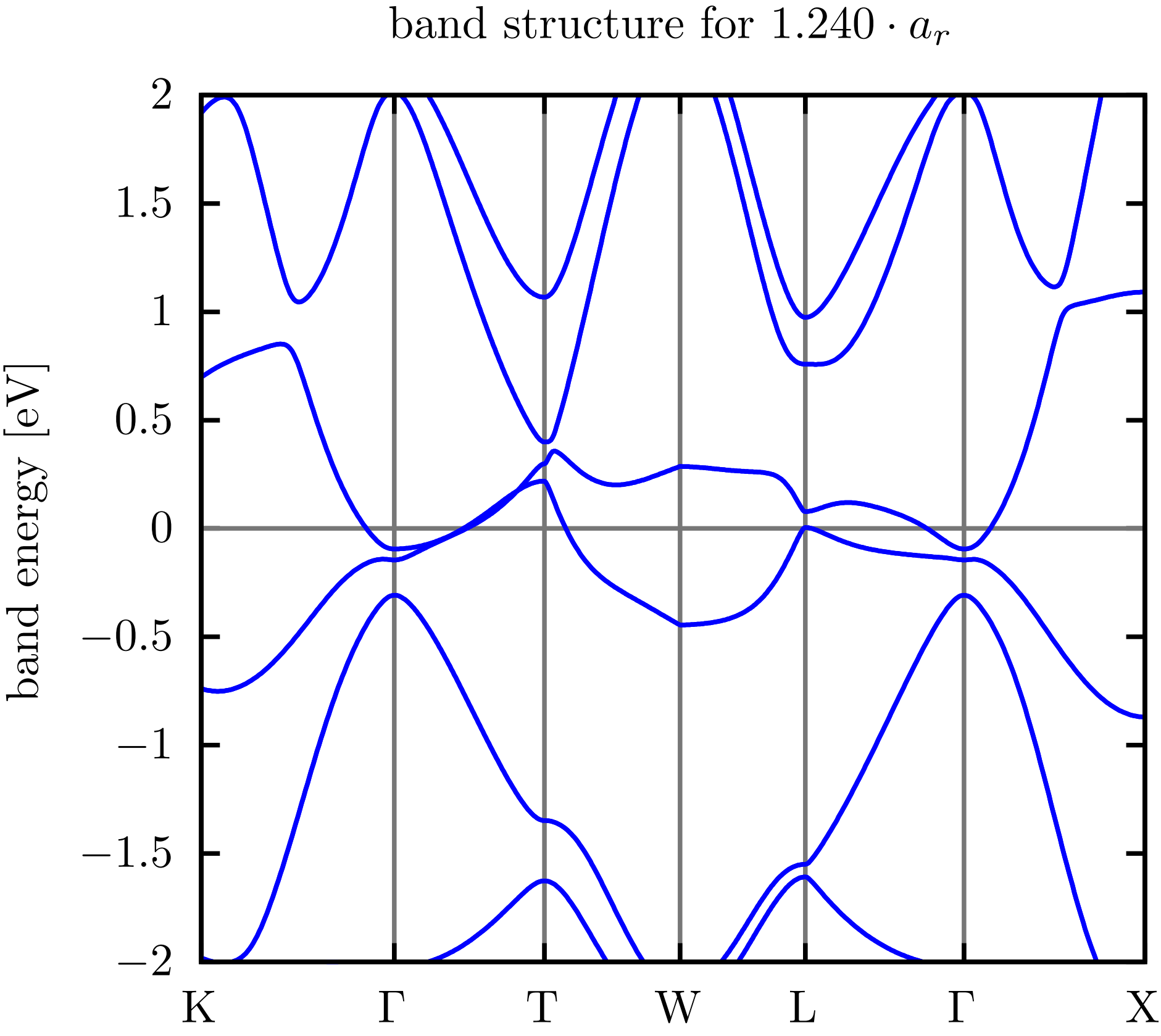

band structure for $1.190 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

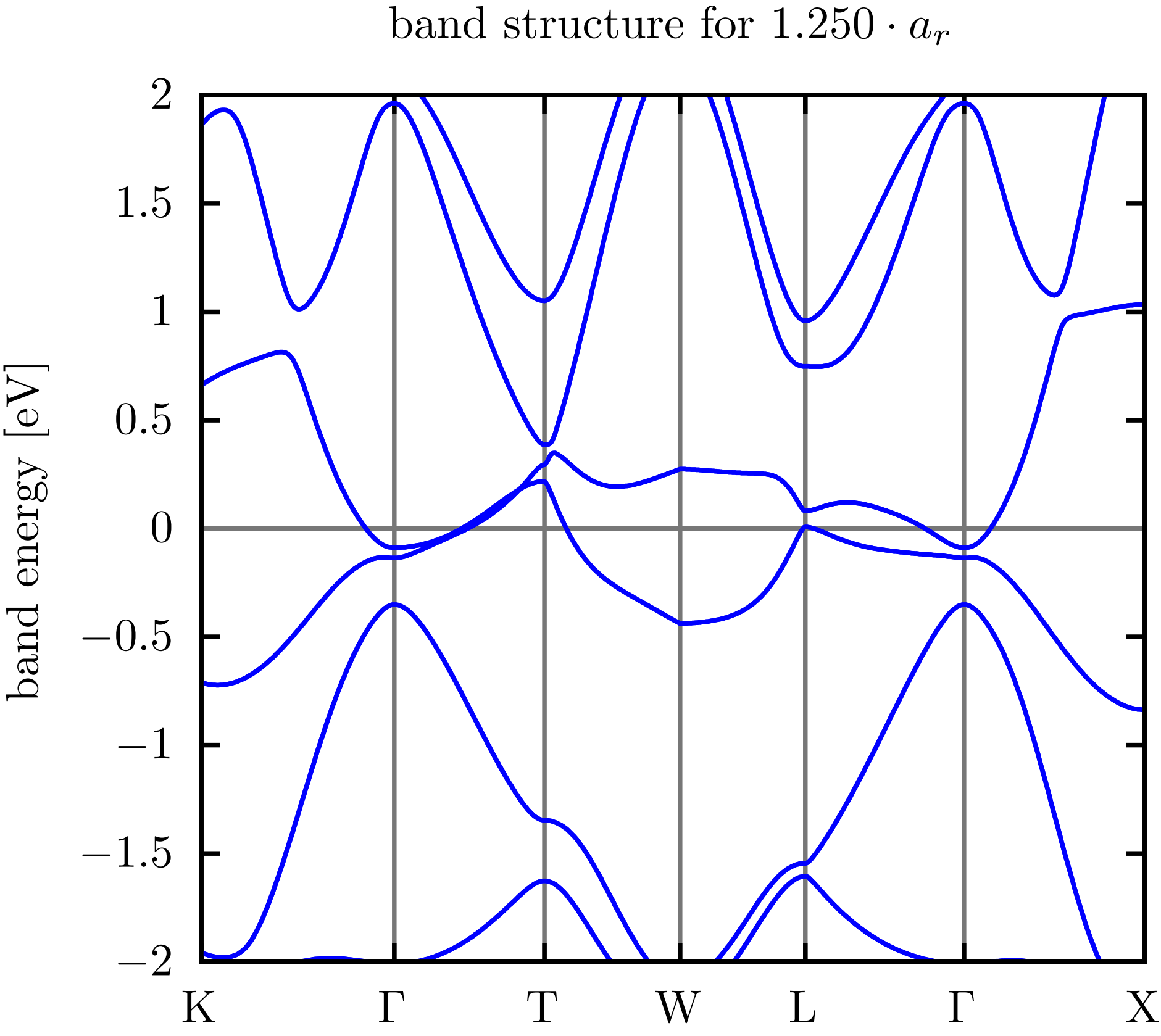

band structure for $1.200 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

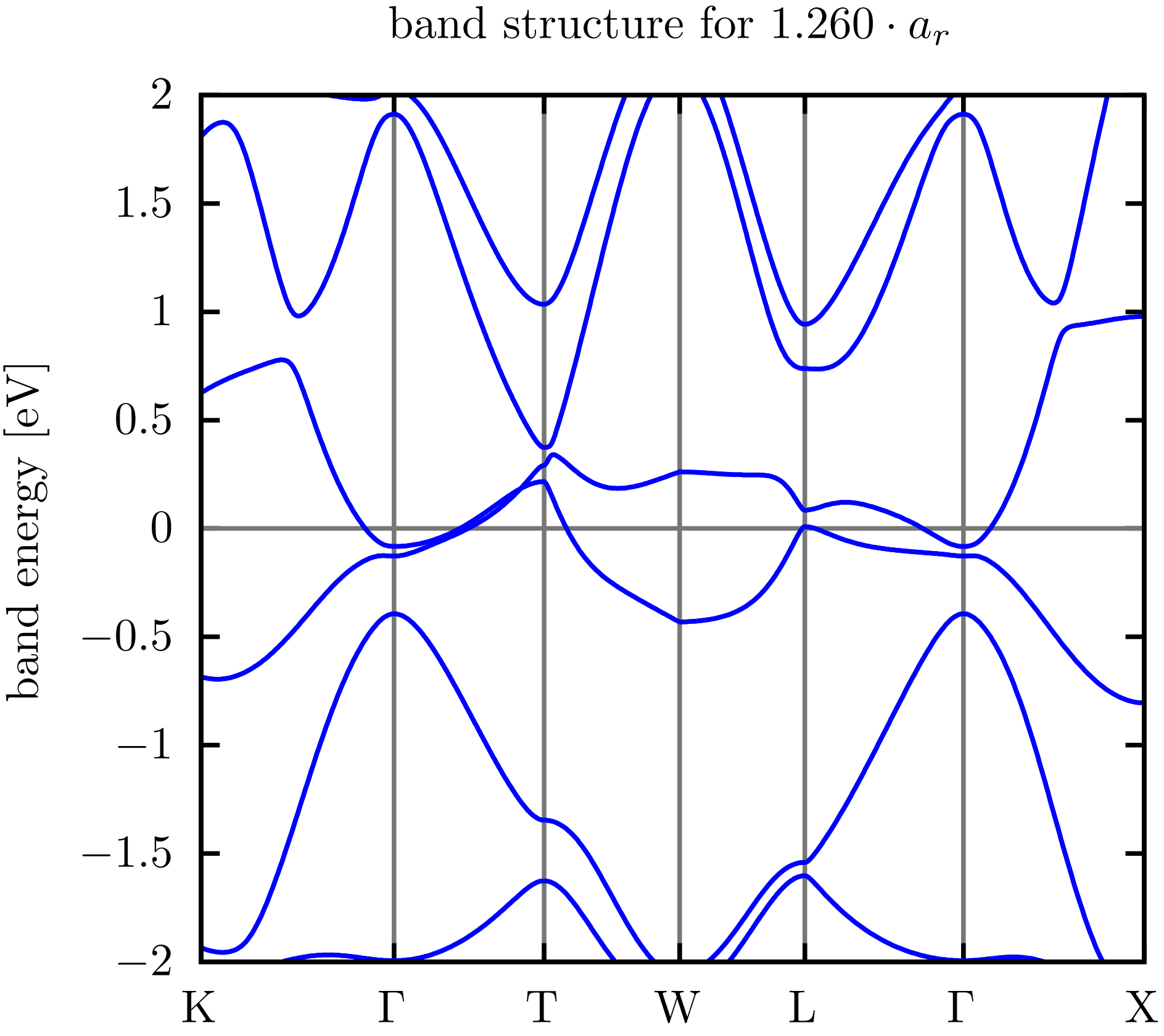

band structure for $1.210 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

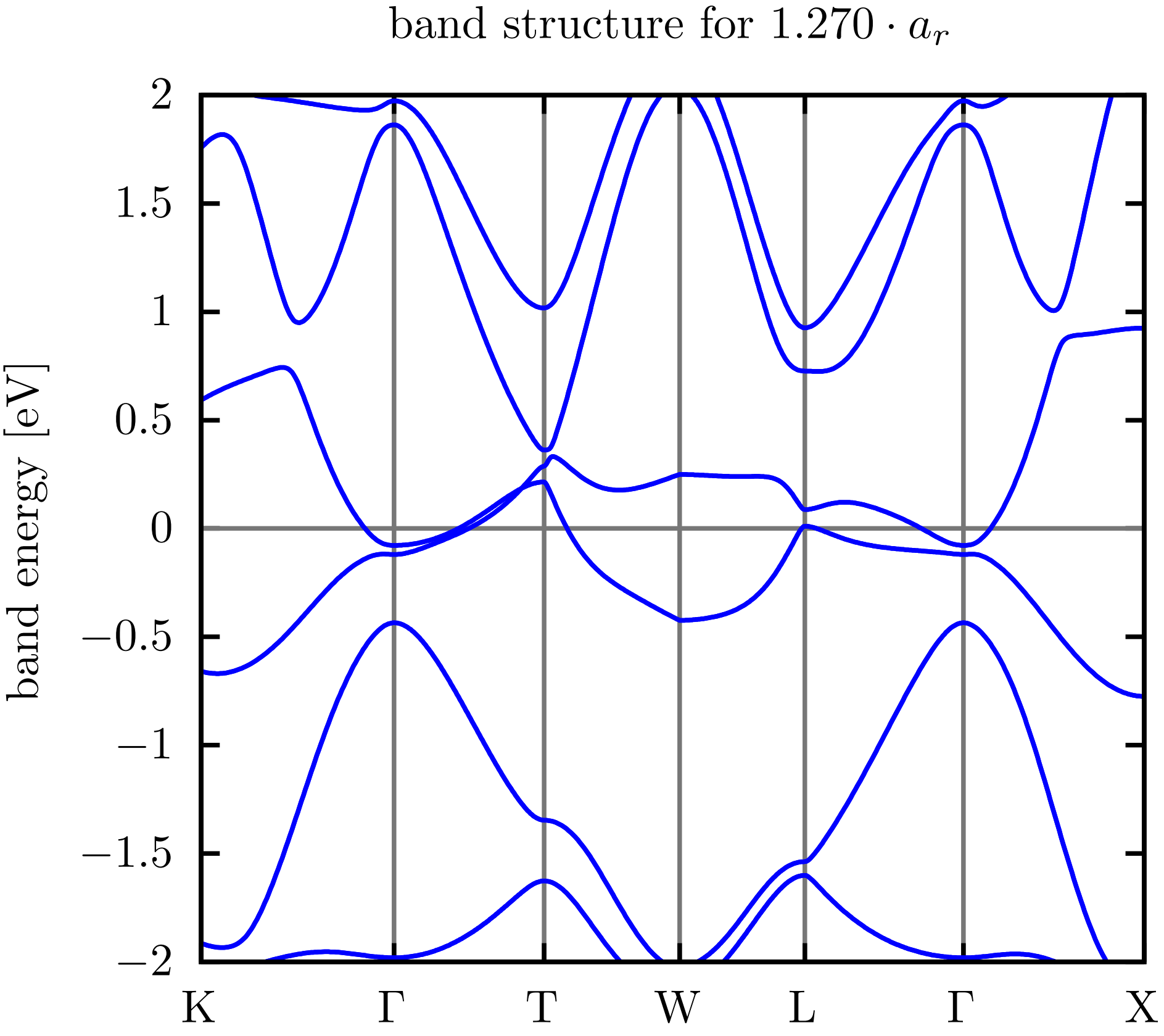

band structure for $1.220 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

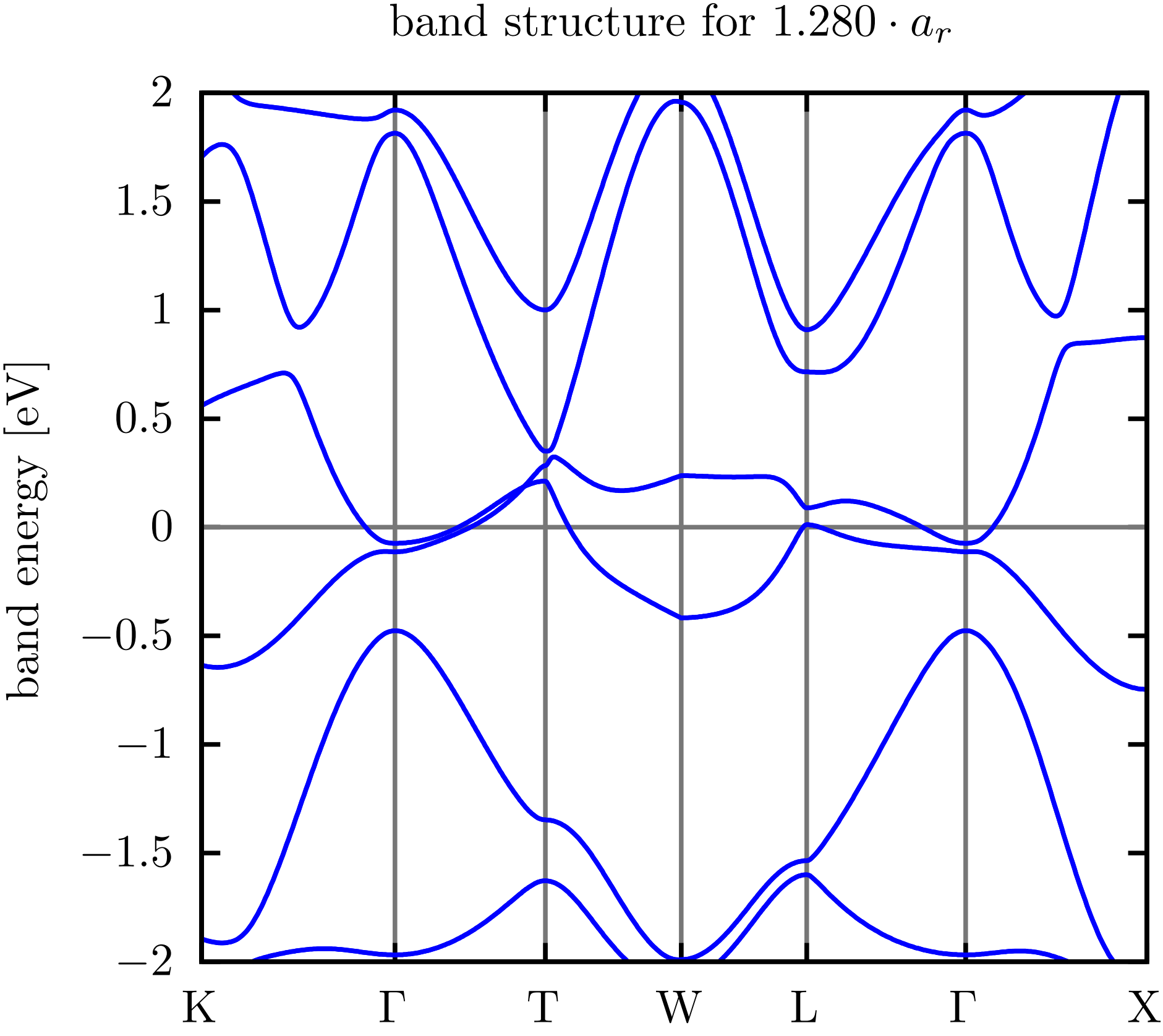

band structure for $1.230 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

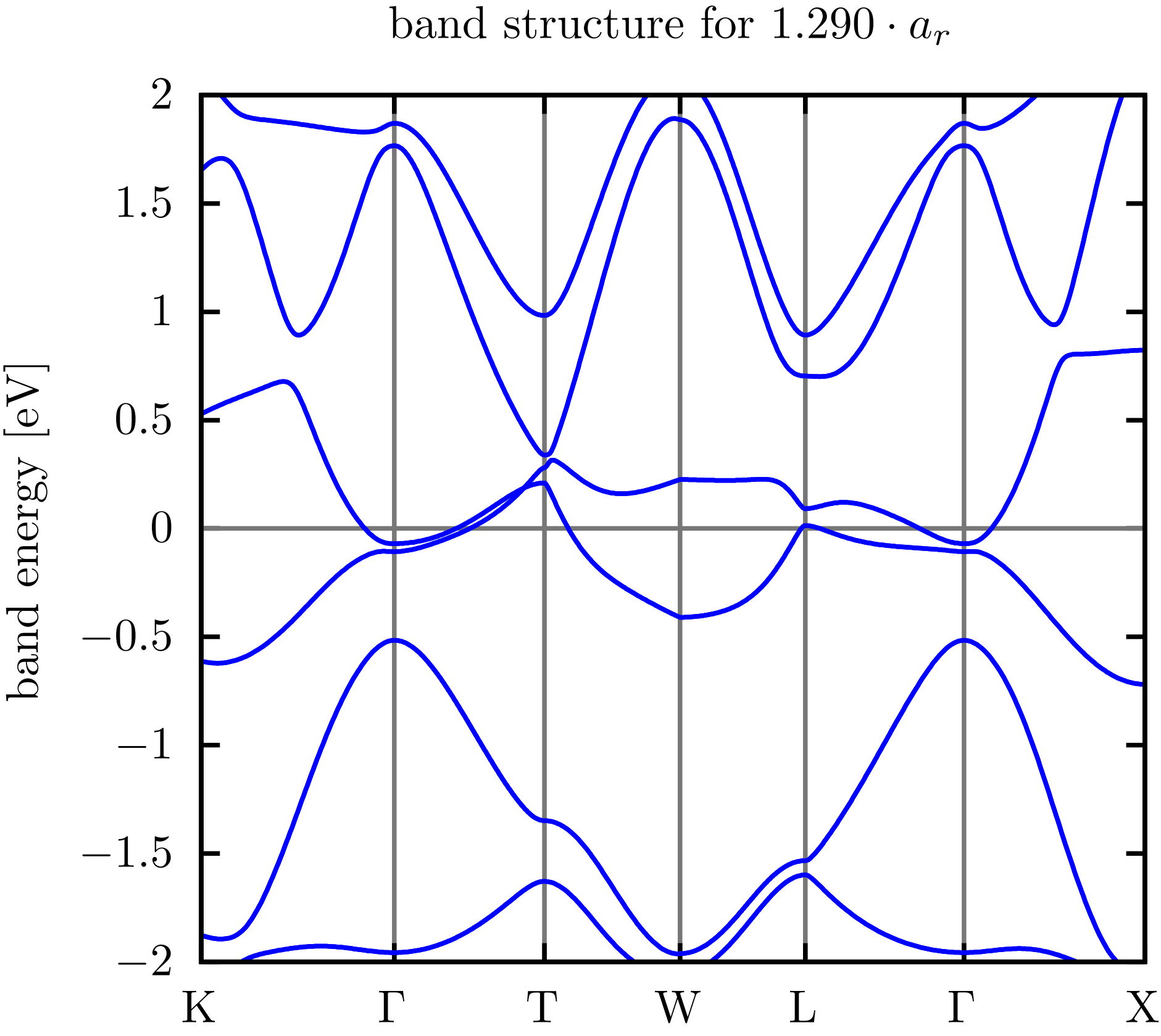

band structure for $1.240 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

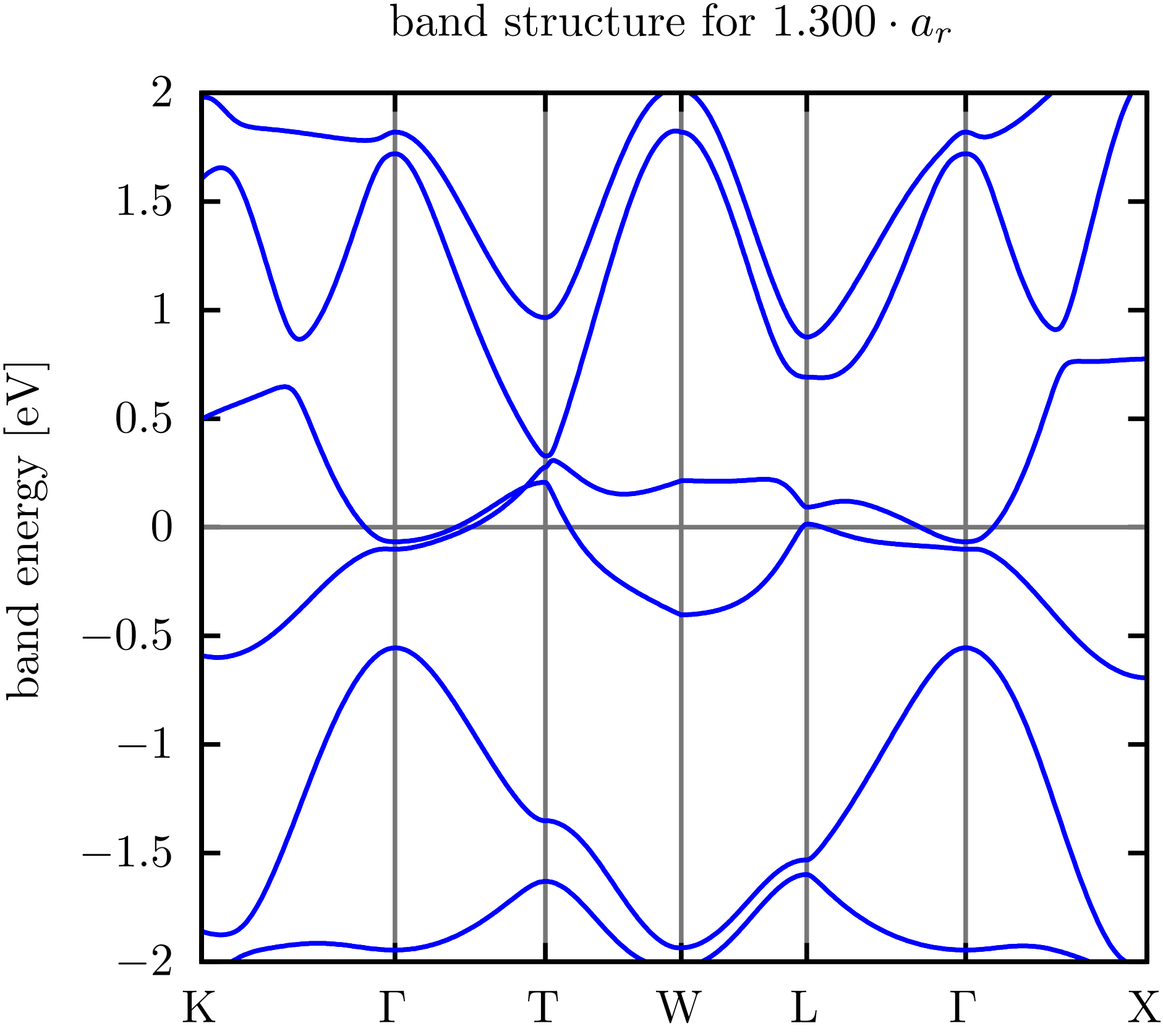

band structure for $1.250 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

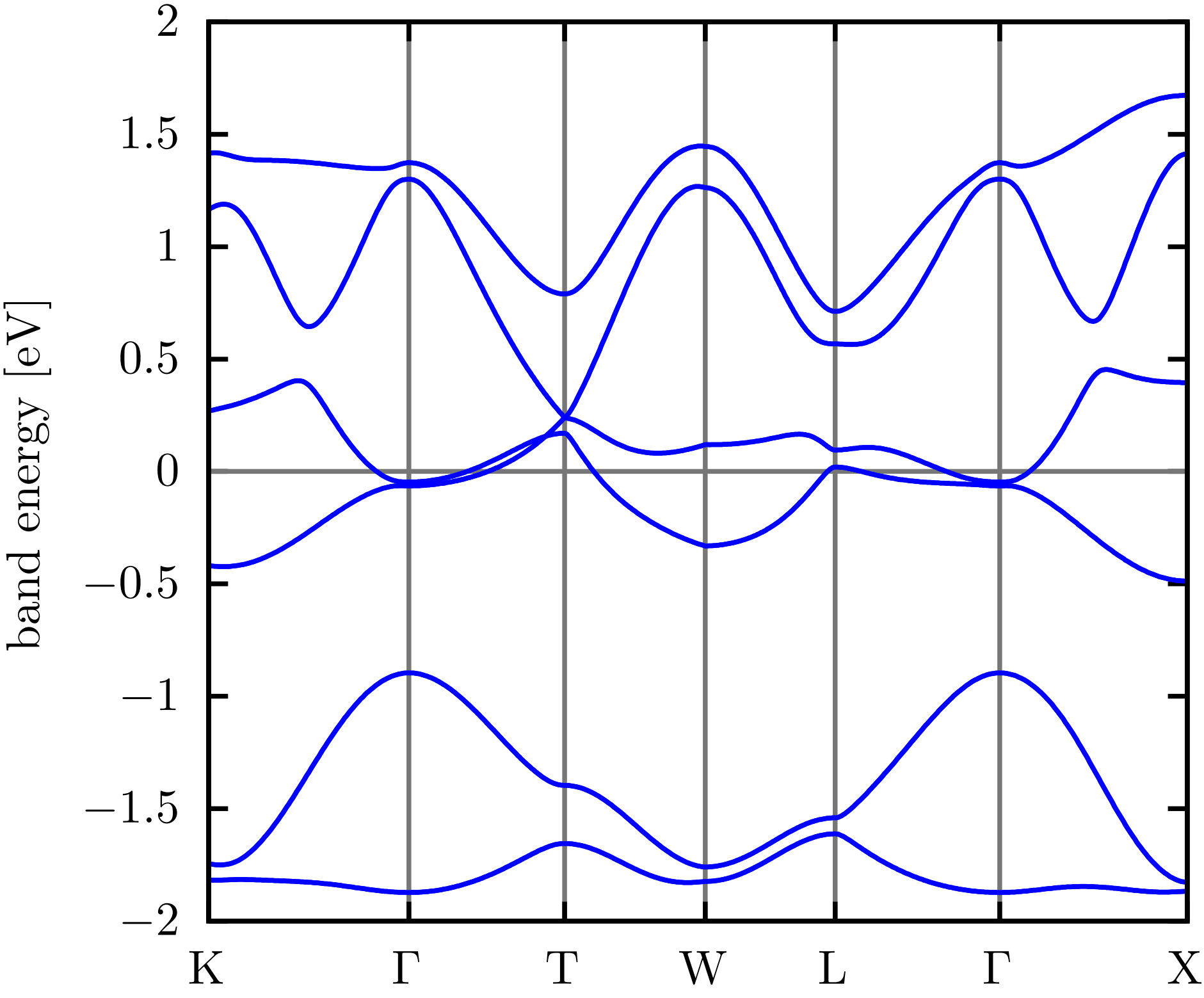

band structure for $1.260 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

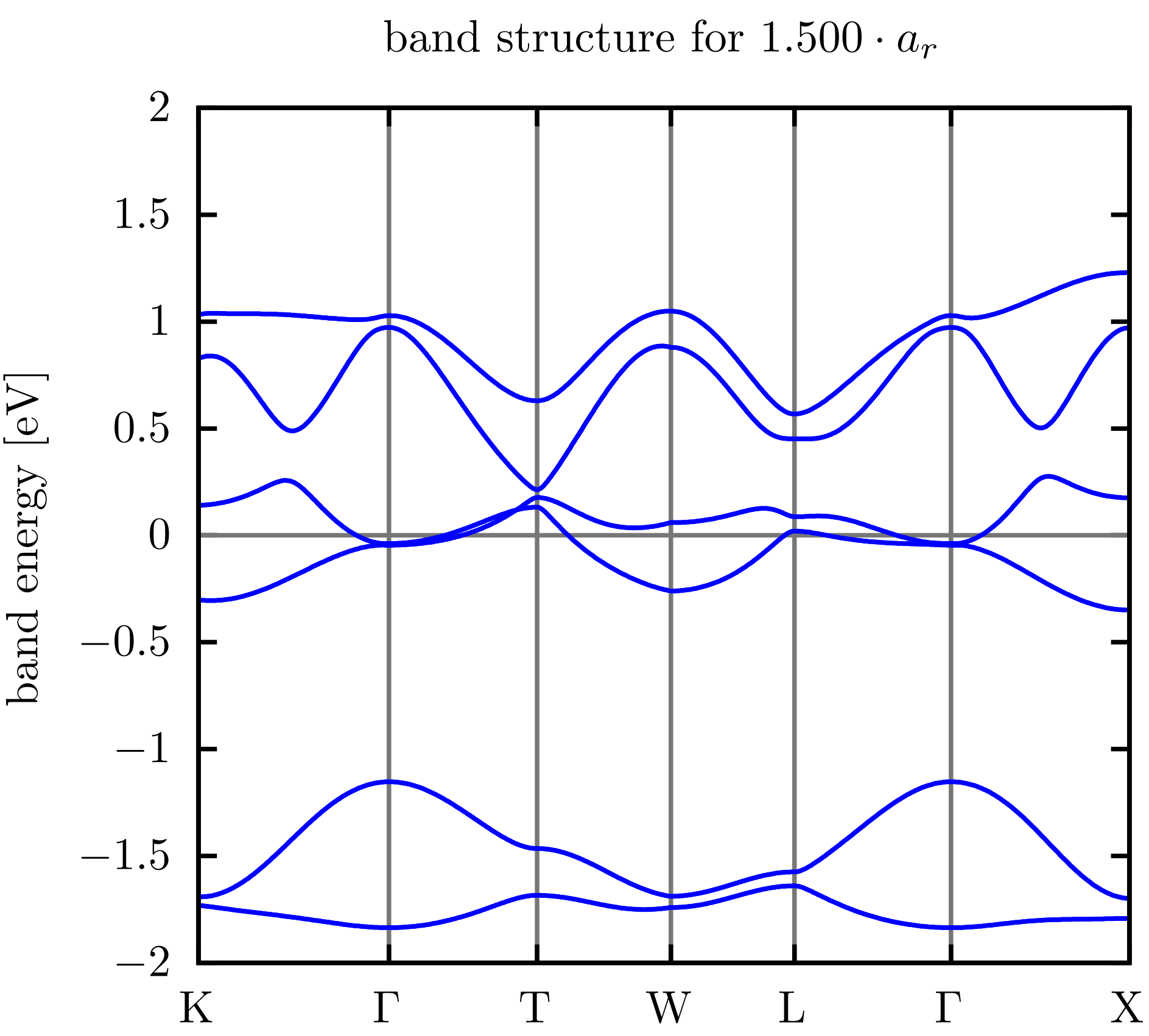

band structure for $1.270 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

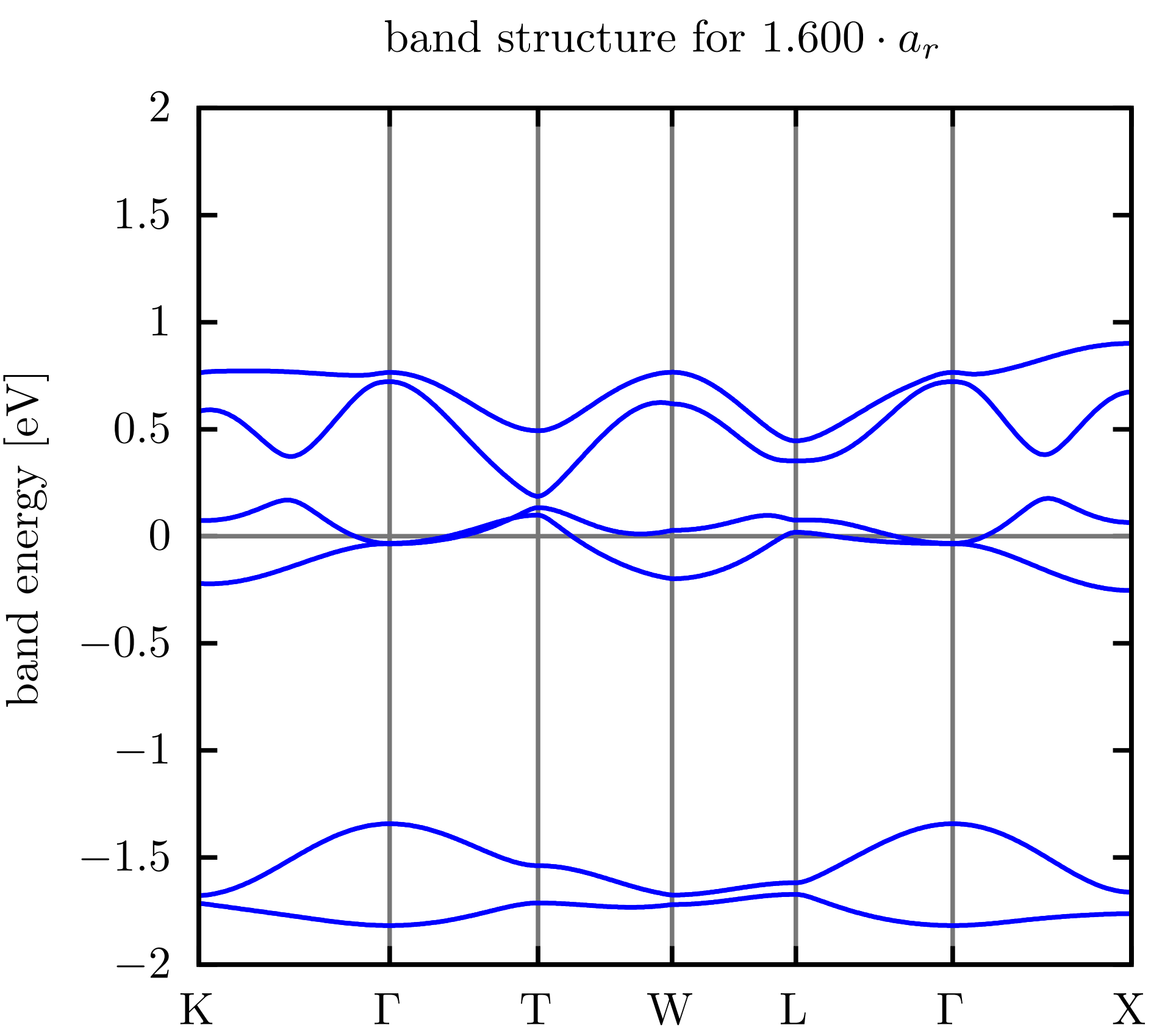

band structure for $1.280 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

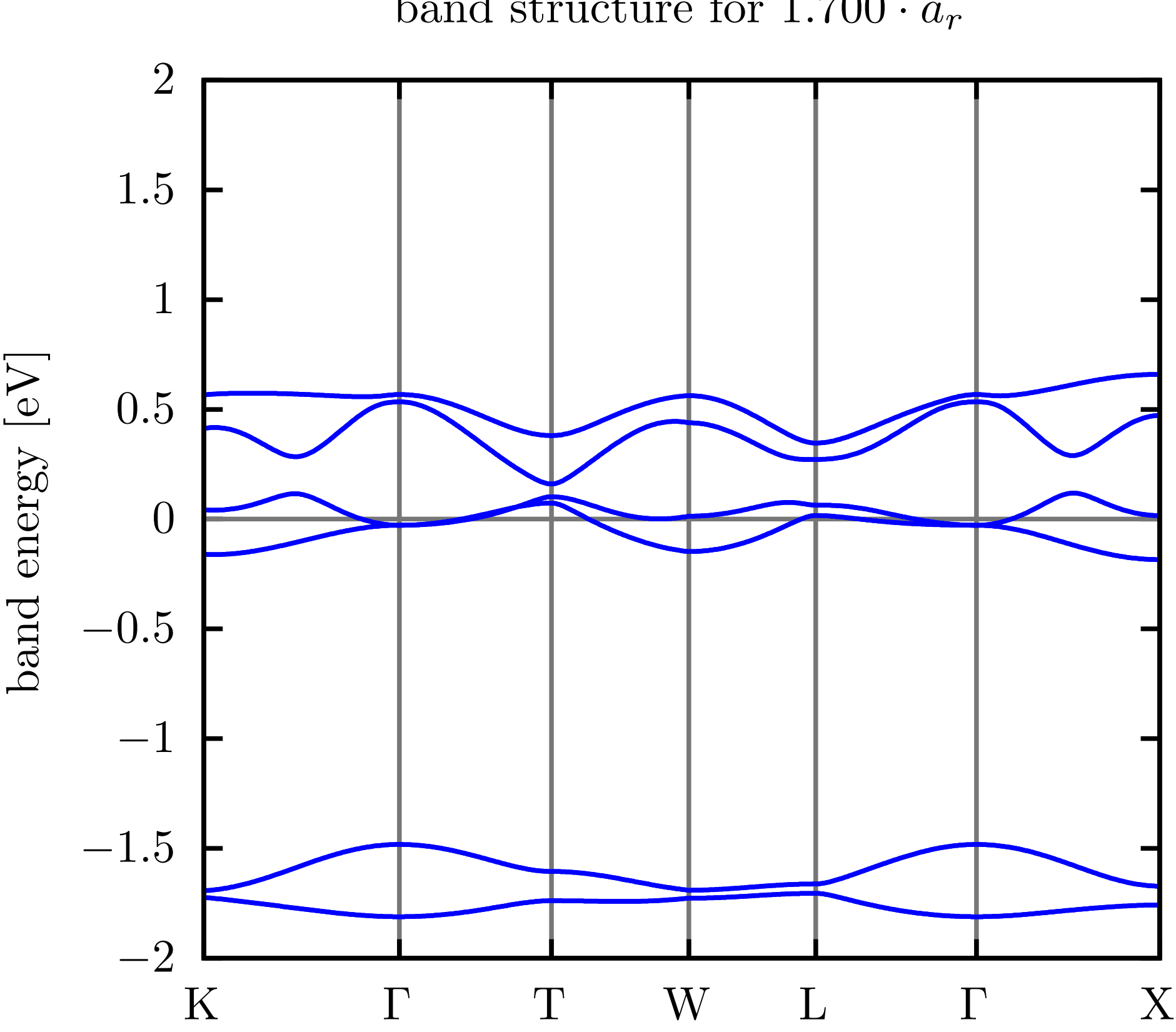

band structure for $1.290 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

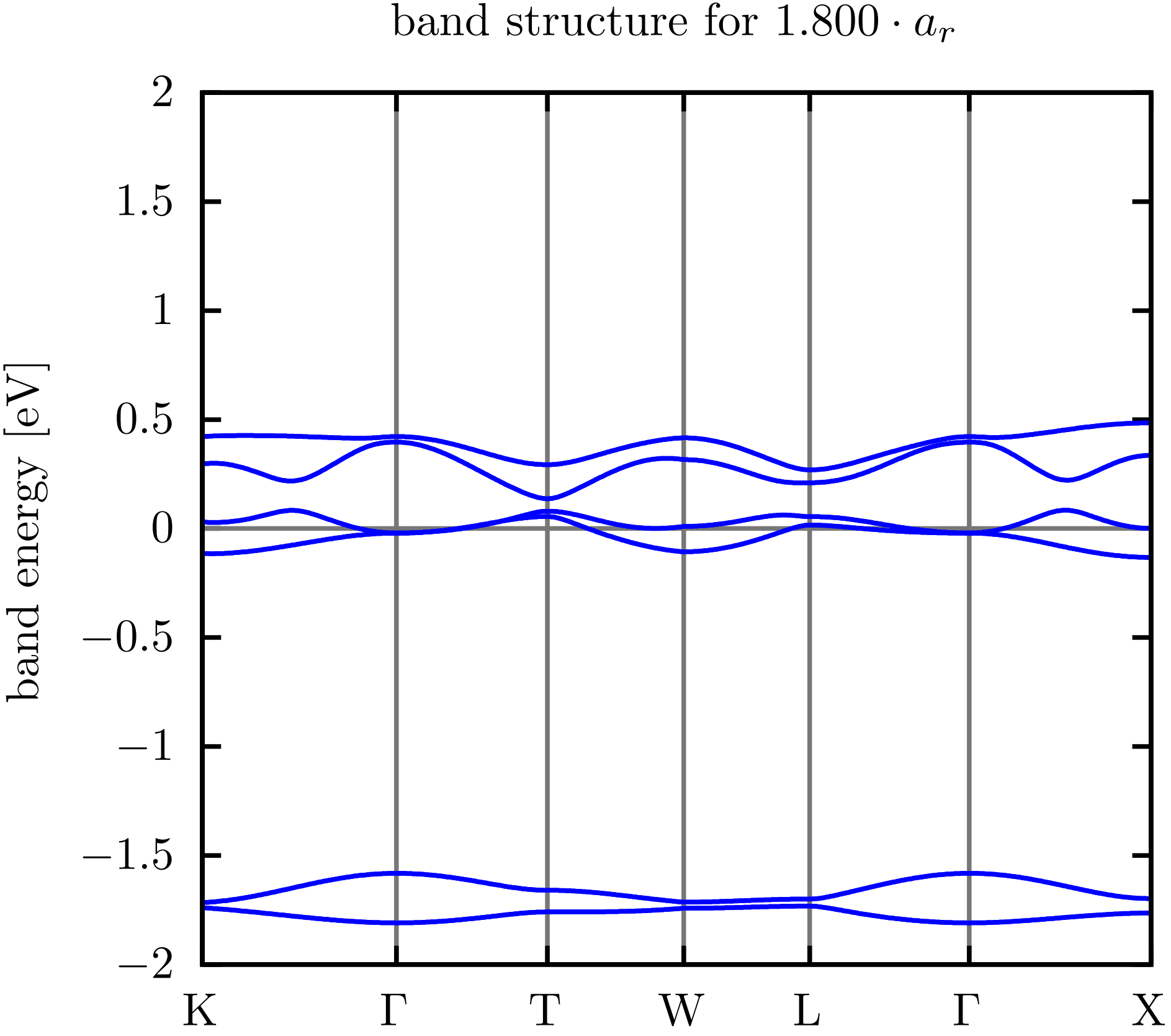

band structure for $1.300 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

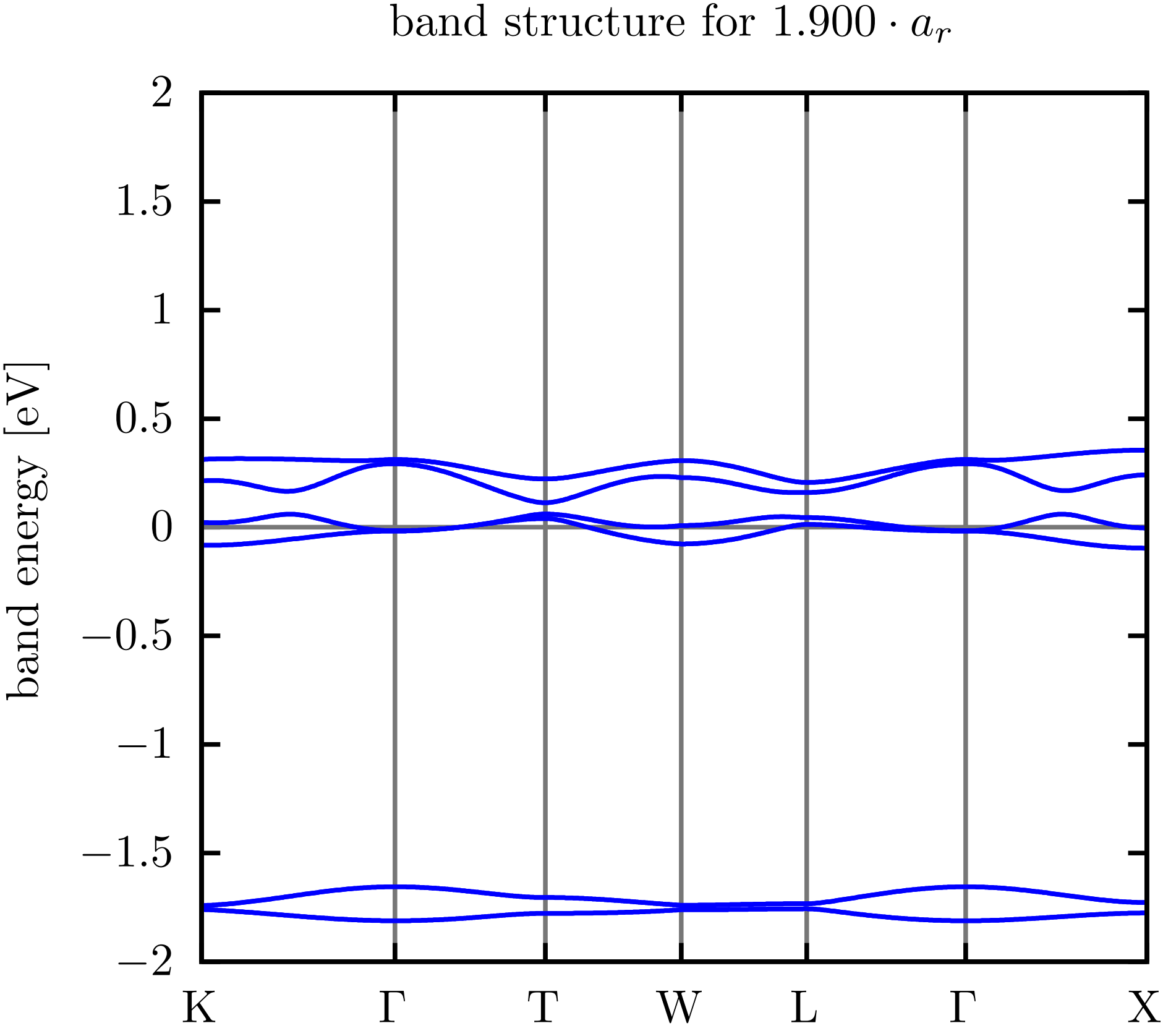

band structure for $1.400 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

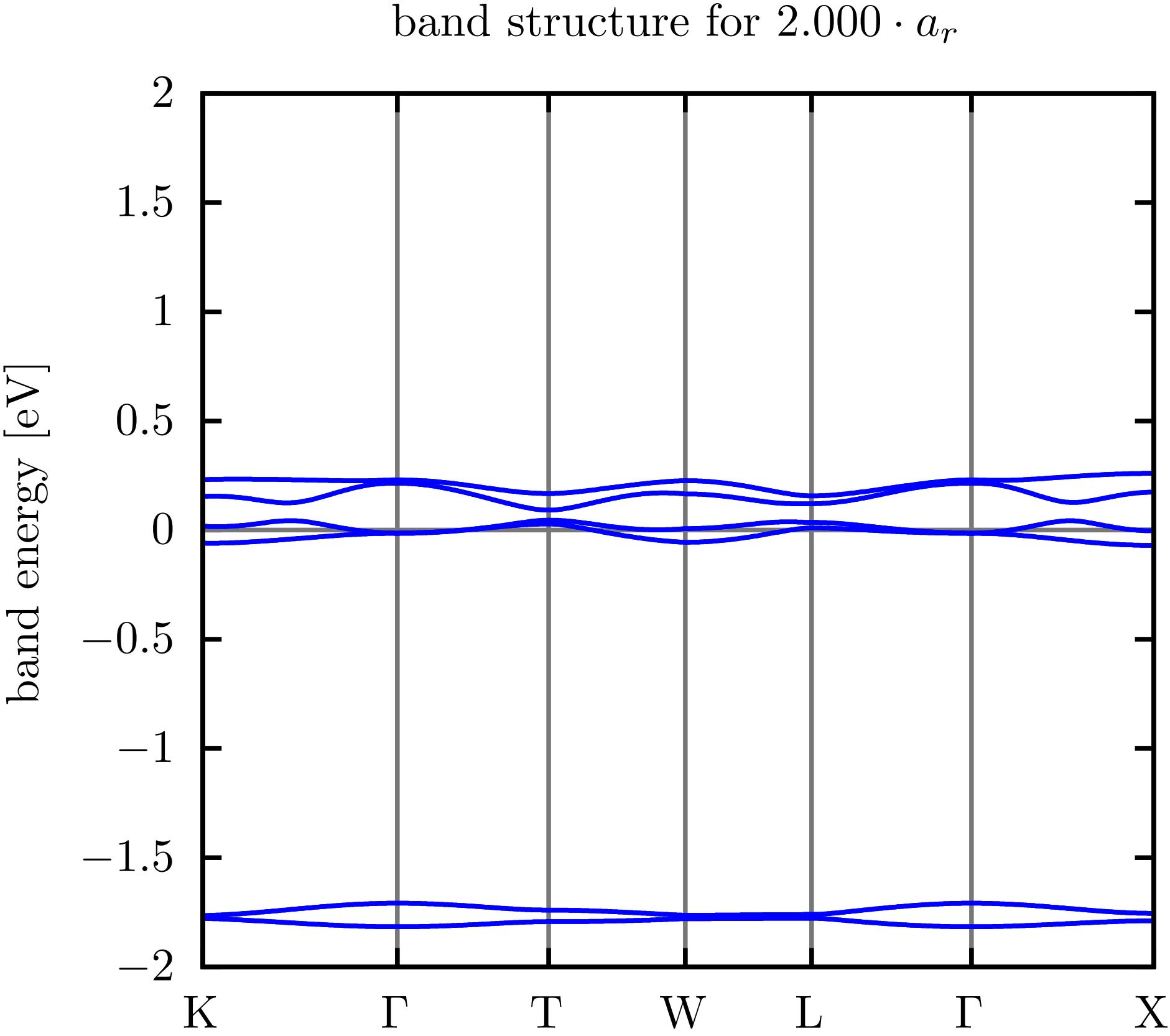

band structure for $1.500 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

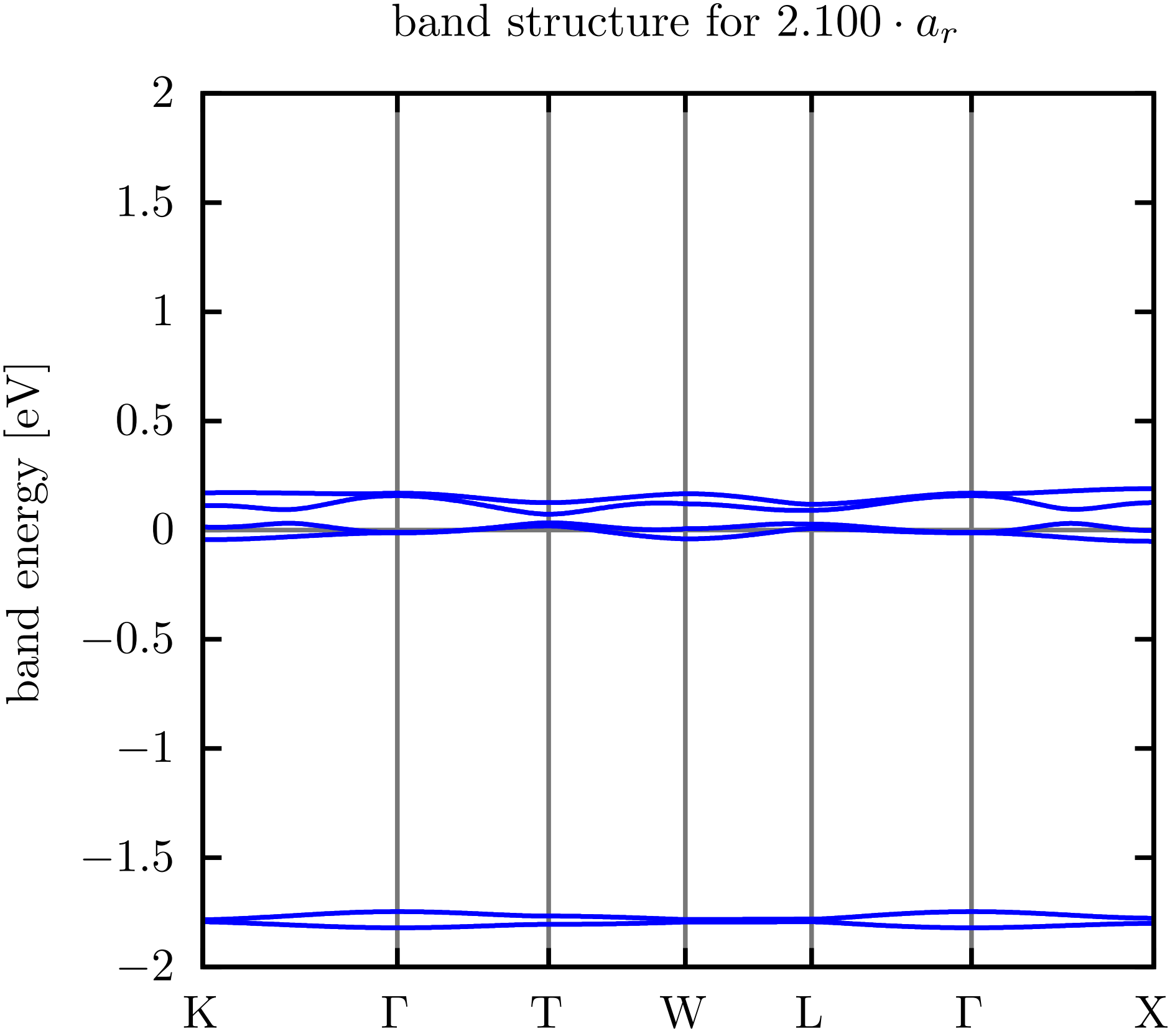

band structure for $1.600 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

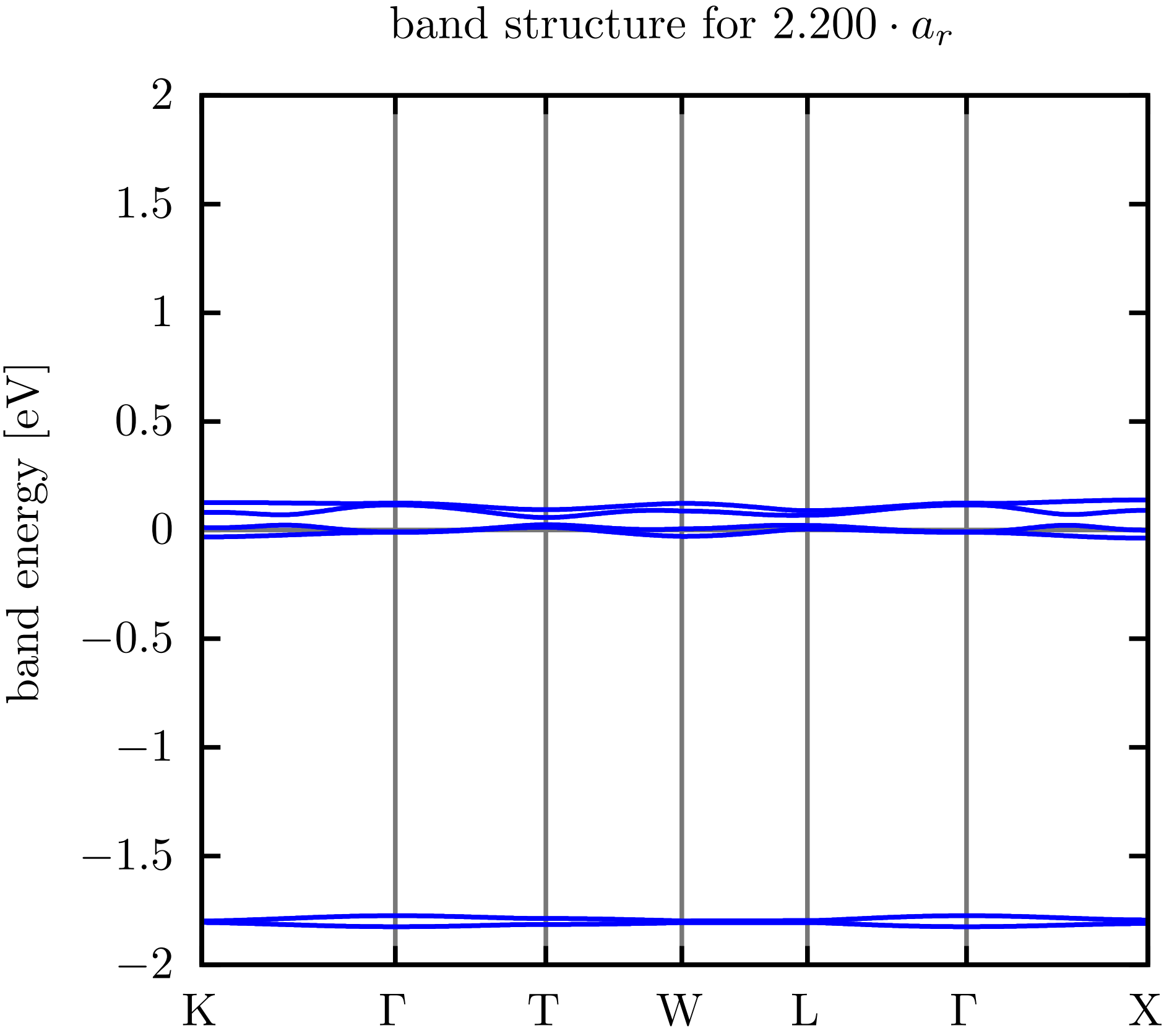

band structure for $1.700 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

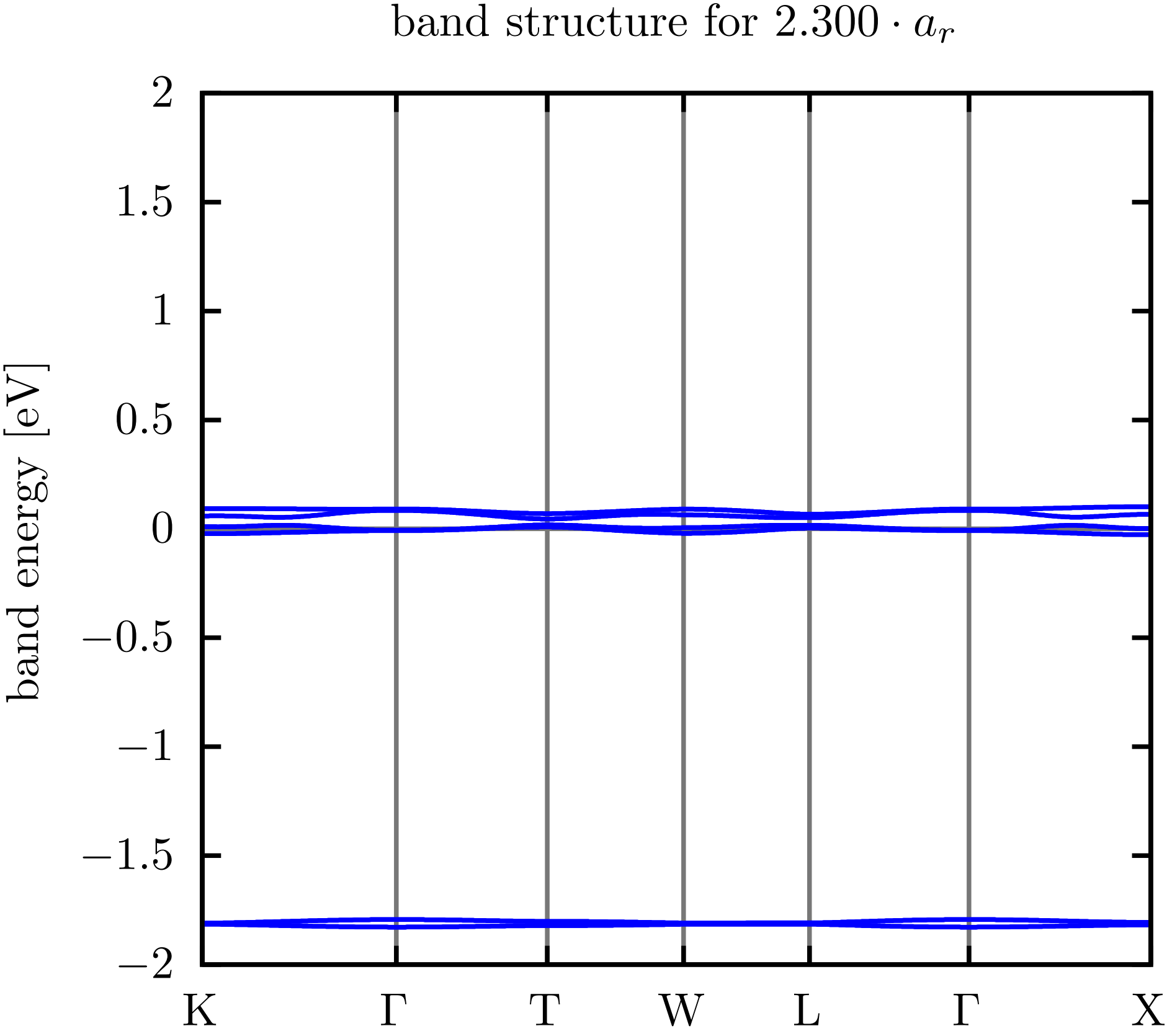

band structure for $1.800 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

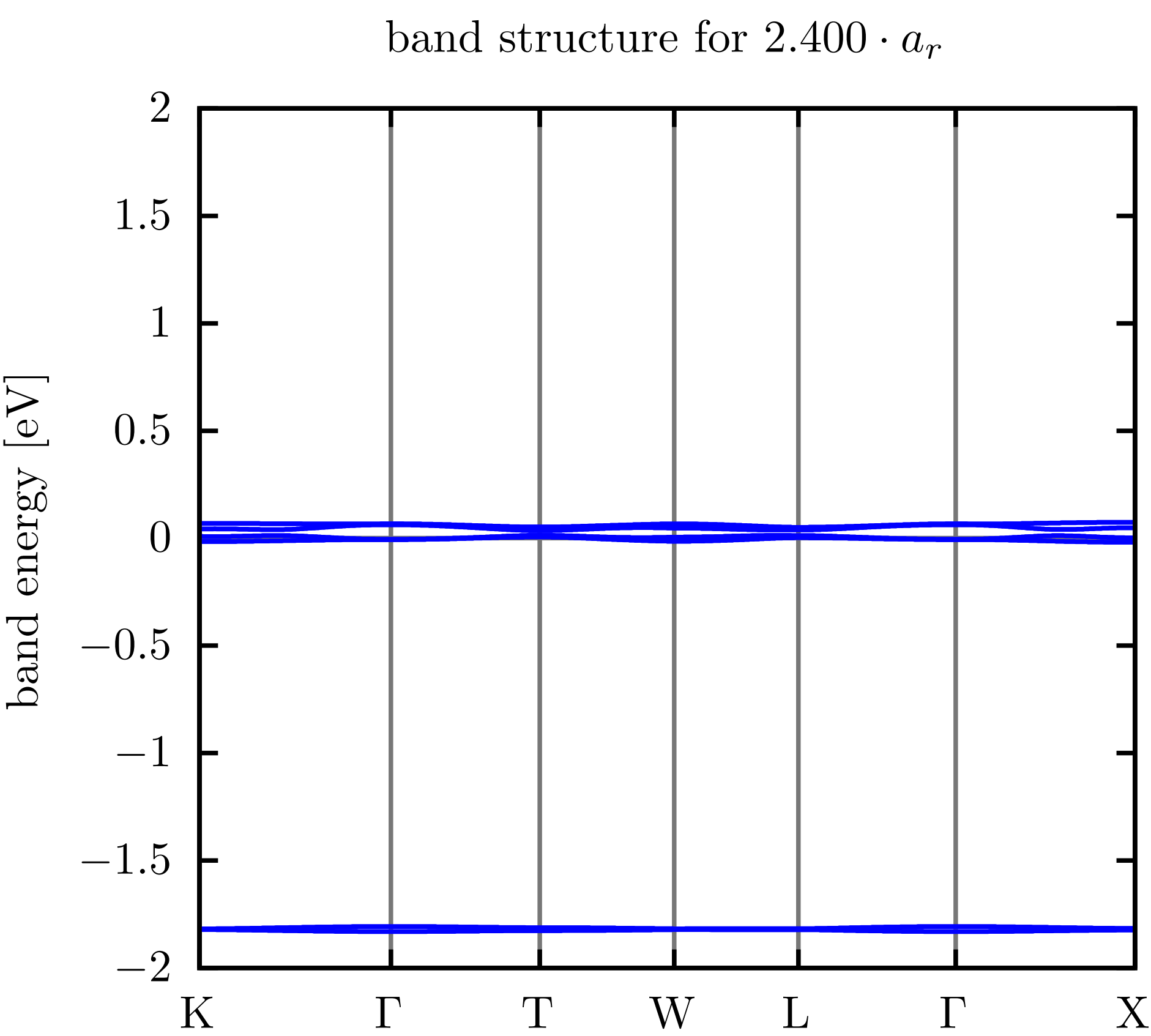

band structure for $1.900 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

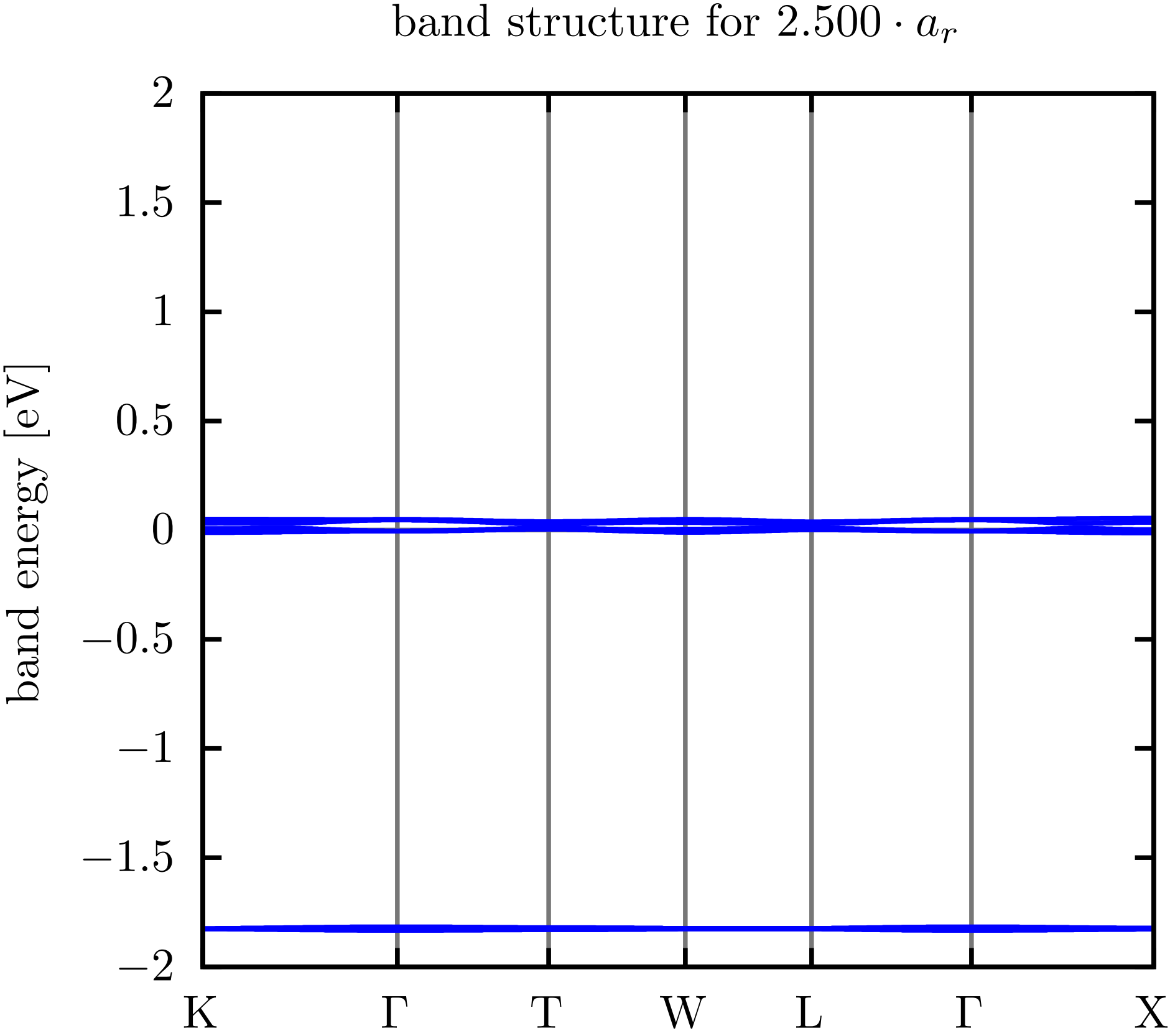

band structure for $2.000 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

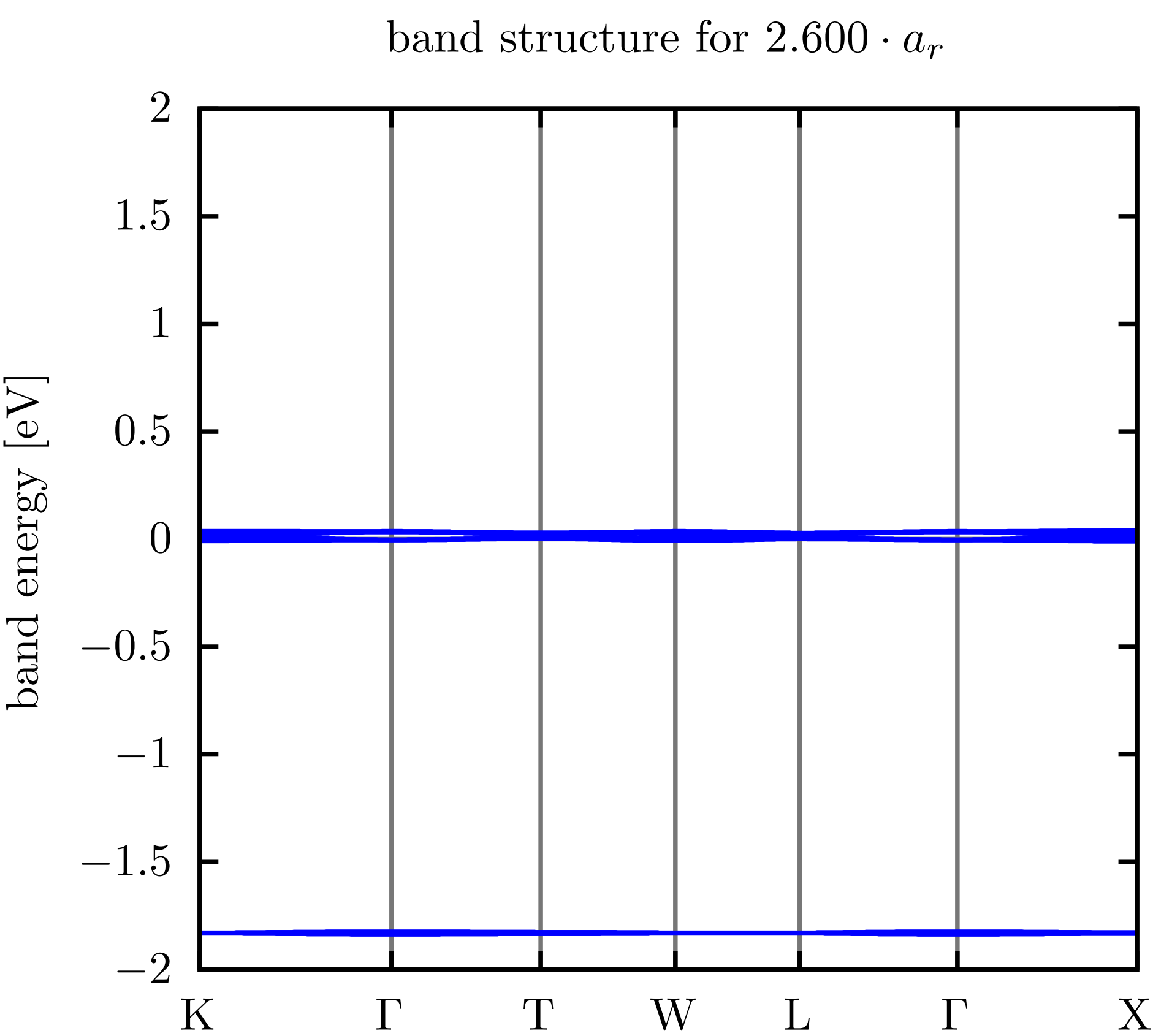

band structure for $2.100 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

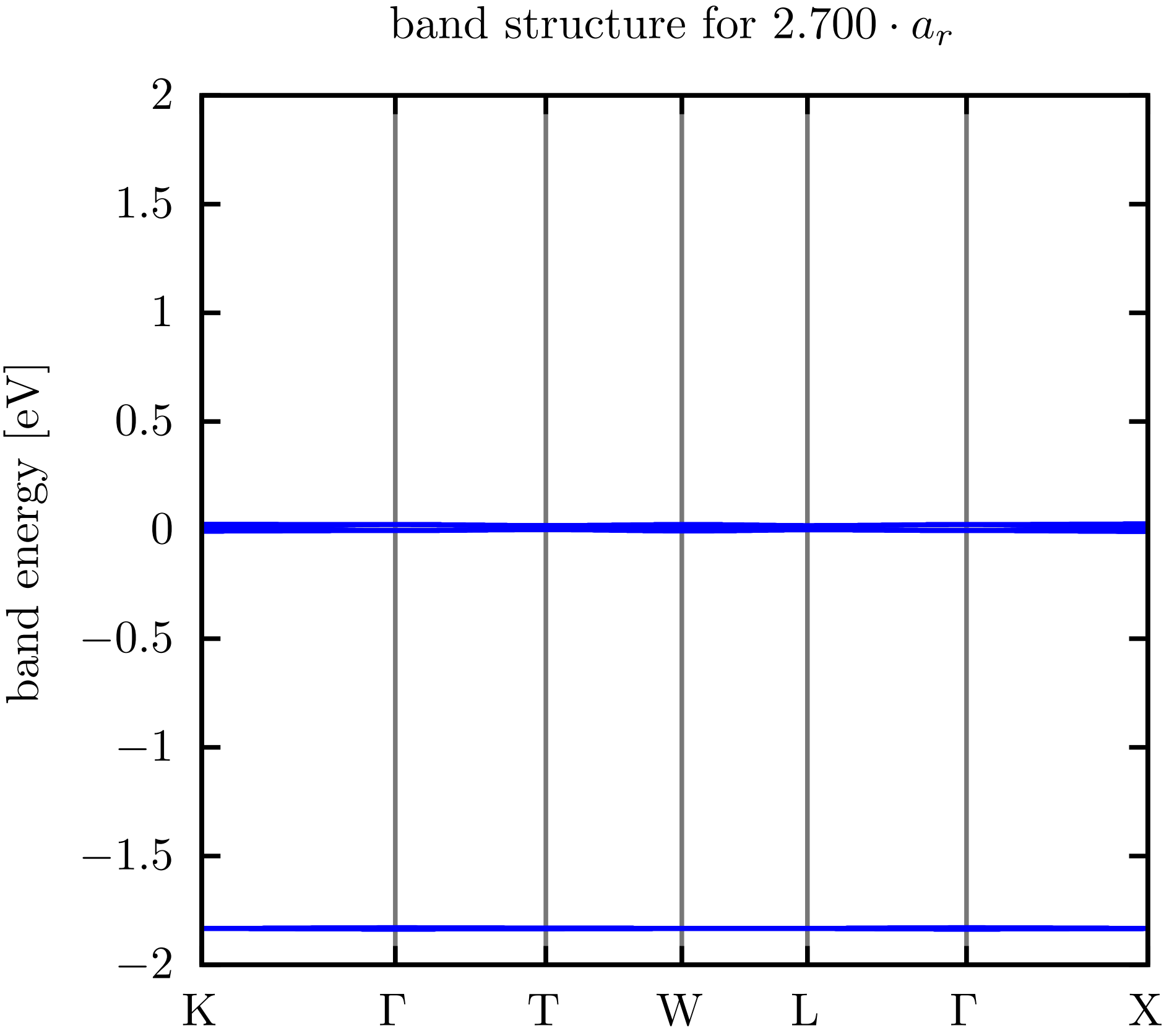

band structure for $2.200 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

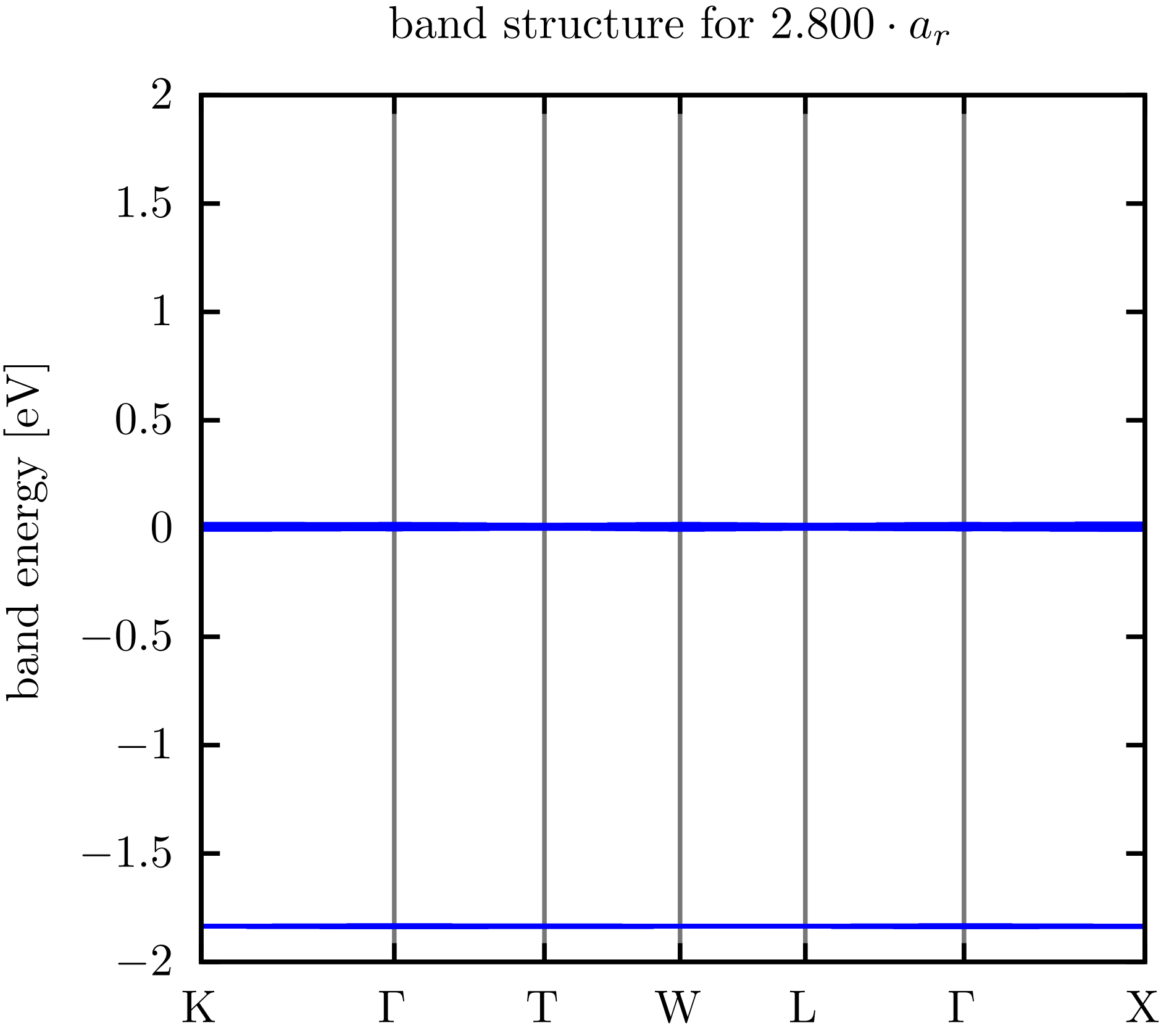

band structure for $2.300 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

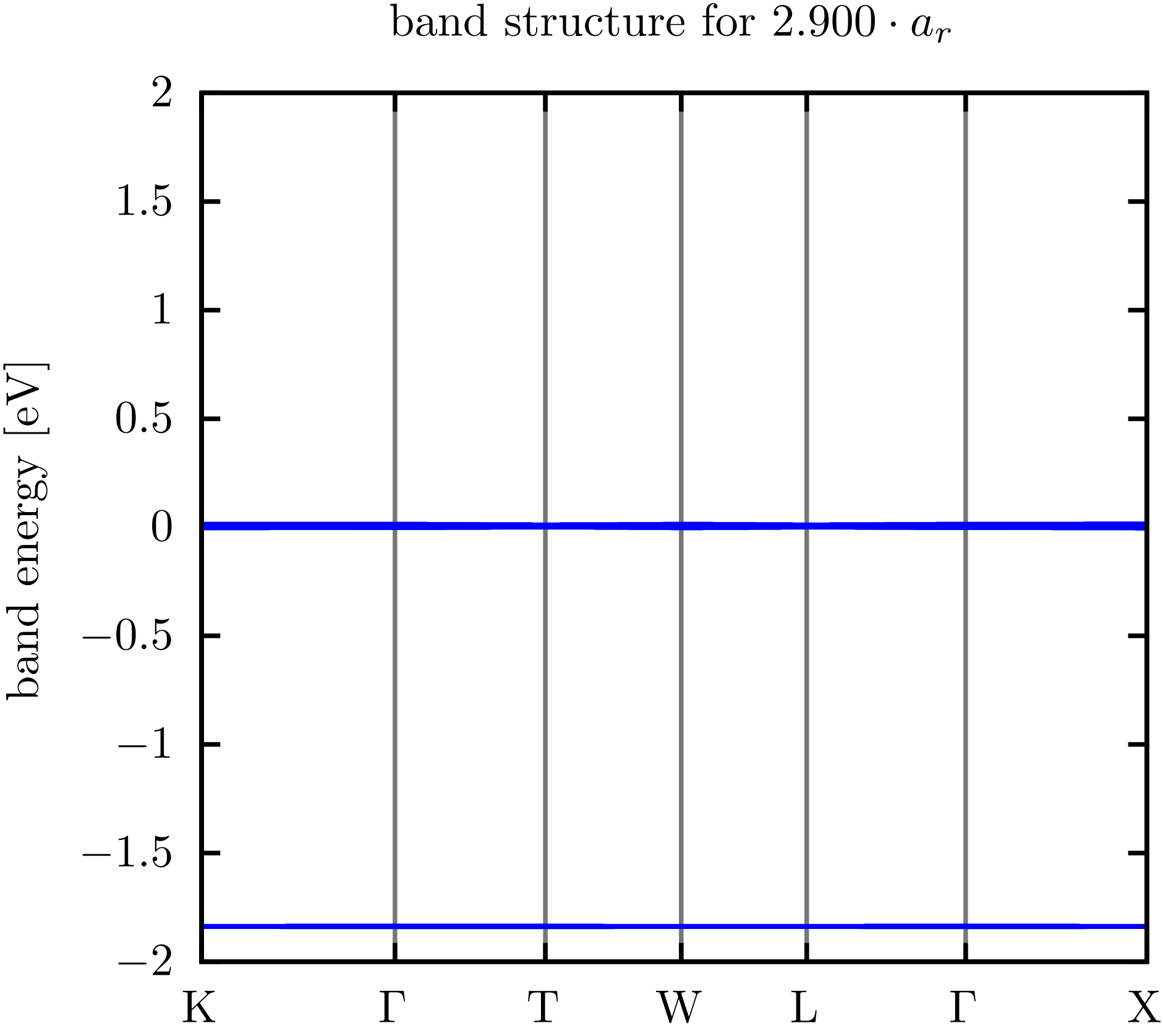

band structure for $2.400 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X

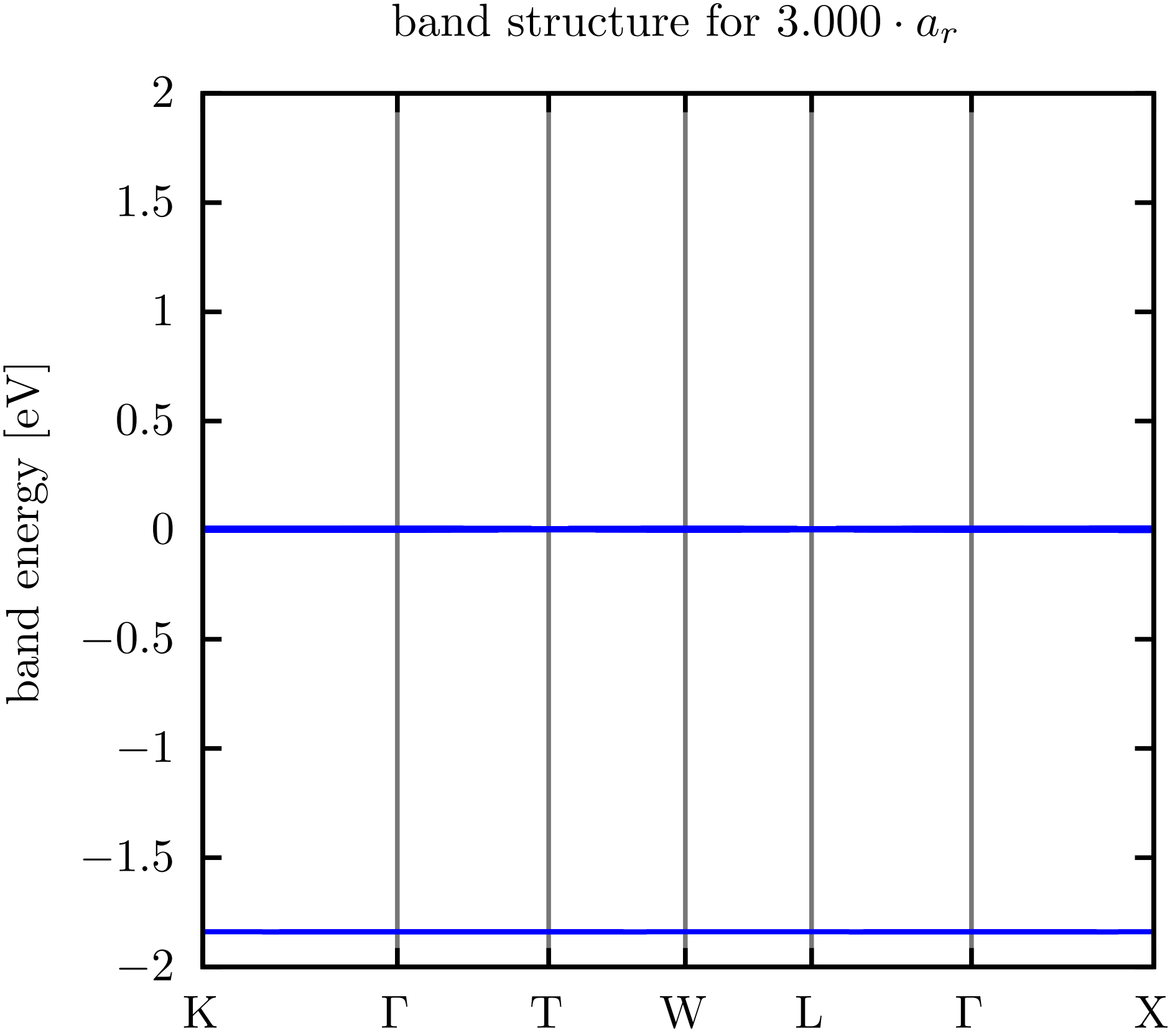

band structure for $2.500 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X


band structure for $2.600 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X


band structure for $2.700 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X


band structure for $2.800 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X


band structure for $2.900 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X


band structure for $3.000 \cdot a_r$
band energy [eV]
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
K
Γ
T
W
L
Γ
X