

Supporting Information:

Bandgap Engineering through Nanoporosity in ZnO

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Calculated properties, cell parameters and fractional coordinates of all 105 considered structures. Structures 1-86 are 4CN-based structures. Structures 87-105 are wz-ZnO-NP structures. Both sets are ordered with respect to increasing V_{pore} . When V_{pore} is the same for two or more structures, they are ordered relative to increasing E_{rel} .

Str 1 (WZ)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.00 eV

E_{rel} : 0.00 eV/ZnO

Pore_{max} : 0.18 nm

V_{pore} : 0 %

D_{pore} : 0

cell parameters

3.280 3.280 5.300 90.00 90.00 120.00

fractional coordinates

Zn 0.646 0.376 0.852

Zn 0.312 0.709 0.352

O 0.312 0.709 0.730

O 0.646 0.376 0.230

Str 2 (4H)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: -0.09 eV

E_{rel} : 0.01 eV/ZnO

Pore_{max} : 0.18 nm

V_{pore} : 0 %

D_{pore} : 0

cell parameters

3.273 3.273 10.639 90.00 90.00 120.00

fractional coordinates

Zn 0.000 0.000 0.906

Zn 0.667 0.333 0.656

Zn 0.000 0.000 0.406

Zn 0.333 0.667 0.156

O 0.667 0.333 0.844

O 0.000 0.000 0.595

O 0.333 0.667 0.344

O 0.000 0.000 0.095

Str 3 (6H)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: -0.12 eV

E_{rel} : 0.01 eV/ZnO

Pore_{max}: 0.18 nm
V_{pore}: 0 %
D_{pore}: 0
cell parameters
3.271 3.271 15.970 90.00 90.00 120.00
fractional coordinates
Zn 0.000 0.000 1.000
Zn 0.333 0.667 0.833
Zn 0.667 0.333 0.667
Zn 0.000 0.000 0.500
Zn 0.667 0.333 0.333
Zn 0.333 0.667 0.167
O 0.000 0.000 0.875
O 0.333 0.667 0.708
O 0.667 0.333 0.541
O 0.000 0.000 0.375
O 0.667 0.333 0.208
O 0.333 0.667 0.041

Str 4 (ZB)
 $\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: -0.17 eV
E_{rel}: 0.01 eV/ZnO
Pore_{max}: 0.18 nm
V_{pore}: 0 %
D_{pore}: 0
cell parameters
4.620 4.620 4.620 90.00 90.00 90.00
fractional coordinates
Zn 0.500 0.203 0.750
Zn 0.000 0.703 0.750
Zn 0.500 0.703 0.250
Zn 0.000 0.203 0.250
O 0.750 0.953 0.500
O 0.250 0.453 0.500
O 0.750 0.453 0.000
O 0.250 0.953 0.000

Str 5 (64_2_5204)¹⁸
 $\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.02 eV
E_{rel}: 0.04 eV/ZnO
Pore_{max}: 0.18 nm
V_{pore}: 0 %
D_{pore}: 0
cell parameters
5.377 13.149 5.699 89.99 89.98 90.02
fractional coordinates
Zn 0.670 0.190 0.920
Zn 0.798 0.690 0.920
Zn 0.674 0.435 0.917
Zn 0.794 0.935 0.917
Zn 0.294 0.935 0.591
Zn 0.174 0.435 0.591

Zn 0.298 0.690 0.589
Zn 0.170 0.190 0.588
Zn 0.670 0.314 0.420
Zn 0.798 0.814 0.420
Zn 0.674 0.068 0.417
Zn 0.794 0.568 0.417
Zn 0.174 0.069 0.091
Zn 0.294 0.569 0.091
Zn 0.298 0.814 0.089
Zn 0.170 0.314 0.088
O 0.172 0.690 0.919
O 0.296 0.190 0.919
O 0.176 0.936 0.918
O 0.292 0.436 0.918
O 0.792 0.436 0.591
O 0.676 0.936 0.591
O 0.672 0.690 0.589
O 0.796 0.190 0.589
O 0.172 0.814 0.419
O 0.296 0.314 0.419
O 0.292 0.068 0.418
O 0.176 0.568 0.418
O 0.792 0.068 0.091
O 0.676 0.568 0.091
O 0.796 0.314 0.089
O 0.672 0.814 0.089

Str 6 (BYL)¹⁹

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.05 eV

E_{rel} : 0.05 eV/ZnO

Pore_{max} : 0.18 nm

V_{pore} : 0 %

D_{pore} : 0

cell parameters

9.858 10.831 5.707 90.00 90.02 90.00

fractional coordinates

Zn 0.845 0.653 0.840

Zn 0.845 0.153 0.840

Zn 0.169 0.653 0.839

Zn 0.169 0.153 0.839

Zn 0.507 0.589 0.836

Zn 0.507 0.089 0.836

Zn 0.007 0.905 0.666

Zn 0.007 0.405 0.666

Zn 0.669 0.841 0.663

Zn 0.669 0.341 0.663

Zn 0.346 0.841 0.662

Zn 0.346 0.341 0.662

Zn 0.346 0.591 0.339

Zn 0.346 0.091 0.339

Zn 0.669 0.591 0.339

Zn 0.669 0.091 0.339

Zn 0.007 0.655 0.336
Zn 0.007 0.155 0.336
Zn 0.507 0.839 0.166
Zn 0.507 0.339 0.166
Zn 0.169 0.903 0.163
Zn 0.169 0.403 0.163
Zn 0.845 0.903 0.163
Zn 0.845 0.403 0.163
O 0.845 0.843 0.837
O 0.845 0.343 0.837
O 0.170 0.843 0.837
O 0.169 0.343 0.837
O 0.507 0.903 0.837
O 0.507 0.403 0.837
O 0.007 0.591 0.665
O 0.007 0.091 0.665
O 0.669 0.651 0.664
O 0.669 0.151 0.664
O 0.345 0.651 0.664
O 0.345 0.151 0.664
O 0.669 0.901 0.338
O 0.669 0.401 0.338
O 0.345 0.901 0.338
O 0.345 0.401 0.338
O 0.007 0.341 0.337
O 0.007 0.841 0.337
O 0.507 0.653 0.165
O 0.507 0.153 0.165
O 0.845 0.593 0.165
O 0.845 0.093 0.165
O 0.169 0.593 0.165
O 0.169 0.093 0.165

Str 7 (64_2_7625)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.07 eV

E_{rel} : 0.05 eV/ZnO

Pore_{max} : 0.17 nm

V_{pore} : 0 %

D_{pore} : 0

cell parameters

5.585 6.513 11.371 90.00 90.01 89.99

fractional coordinates

Zn 0.304 0.321 0.924

Zn 0.167 0.821 0.924

Zn 0.667 0.049 0.833

Zn 0.804 0.549 0.833

Zn 0.304 0.549 0.673

Zn 0.167 0.049 0.673

Zn 0.667 0.821 0.583

Zn 0.804 0.321 0.583

Zn 0.167 0.795 0.424

Zn 0.304 0.295 0.424

Zn 0.804 0.066 0.333
Zn 0.667 0.567 0.333
Zn 0.167 0.566 0.173
Zn 0.304 0.066 0.173
Zn 0.667 0.795 0.083
Zn 0.804 0.295 0.083
O 0.801 0.817 0.923
O 0.670 0.317 0.923
O 0.301 0.052 0.833
O 0.170 0.552 0.833
O 0.670 0.552 0.673
O 0.801 0.052 0.673
O 0.301 0.818 0.583
O 0.170 0.318 0.583
O 0.802 0.798 0.423
O 0.670 0.298 0.423
O 0.301 0.564 0.333
O 0.170 0.064 0.333
O 0.801 0.564 0.173
O 0.670 0.064 0.173
O 0.301 0.798 0.083
O 0.170 0.298 0.083

Str 8

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.07 eV

E_{rel} : 0.05 eV/ZnO

Pore_{max}: 0.17 nm

V_{pore}: 0 %

D_{pore}: 0

cell parameters

6.516 19.702 5.578 90.00 90.00 60.06

fractional coordinates

Zn 0.660 0.058 0.729

Zn 0.160 0.558 0.728

Zn 0.666 0.224 0.728

Zn 0.166 0.724 0.728

Zn 0.644 0.391 0.728

Zn 0.144 0.891 0.728

Zn 0.144 0.391 0.593

Zn 0.644 0.891 0.593

Zn 0.166 0.224 0.593

Zn 0.666 0.724 0.593

Zn 0.160 0.058 0.593

Zn 0.660 0.558 0.593

Zn 0.805 0.285 0.229

Zn 0.305 0.785 0.228

Zn 0.799 0.118 0.228

Zn 0.299 0.618 0.228

Zn 0.322 0.451 0.228

Zn 0.822 0.951 0.228

Zn 0.822 0.451 0.093

Zn 0.322 0.951 0.093

Zn 0.299 0.118 0.093
Zn 0.799 0.618 0.093
Zn 0.305 0.285 0.093
Zn 0.805 0.785 0.093
O 0.306 0.285 0.726
O 0.302 0.118 0.726
O 0.802 0.618 0.726
O 0.806 0.785 0.726
O 0.820 0.451 0.726
O 0.320 0.951 0.726
O 0.320 0.452 0.595
O 0.820 0.951 0.595
O 0.806 0.285 0.595
O 0.802 0.118 0.595
O 0.302 0.618 0.594
O 0.306 0.785 0.594
O 0.164 0.224 0.227
O 0.664 0.724 0.227
O 0.159 0.058 0.226
O 0.659 0.558 0.226
O 0.146 0.391 0.226
O 0.646 0.891 0.226
O 0.646 0.391 0.095
O 0.659 0.058 0.095
O 0.146 0.891 0.095
O 0.159 0.558 0.095
O 0.663 0.225 0.094
O 0.163 0.725 0.094

Str 9 (64_1_1)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.08 eV

E_{rel} : 0.06 eV/ZnO

Pore_{max}: 0.17 nm

V_{pore} : 0 %

D_{pore} : 0

cell parameters

5.706 6.513 5.566 90.00 90.00 90.00

fractional coordinates

Zn 0.555 0.813 0.715

Zn 0.055 0.045 0.715

Zn 0.555 0.313 0.582

Zn 0.055 0.545 0.582

Zn 0.875 0.813 0.215

Zn 0.375 0.045 0.215

Zn 0.875 0.313 0.082

Zn 0.375 0.545 0.082

O 0.874 0.312 0.714

O 0.374 0.546 0.714

O 0.874 0.812 0.582

O 0.374 0.046 0.582

O 0.055 0.546 0.214

O 0.555 0.312 0.214

O 0.055 0.046 0.082
O 0.555 0.812 0.082

Str 10 (59_4_253337)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: -0.01 eV

E_{rel} : 0.02 eV/ZnO

Pore_{max}: 0.18 nm

V_{pore} : 1 %

D_{pore} : 1

cell parameters

22.770 5.328 6.577 90.00 90.00 90.00

fractional coordinates

Zn 0.669 0.175 0.754

Zn 0.834 0.675 0.754

Zn 0.334 0.806 0.754

Zn 0.169 0.306 0.754

Zn 0.918 0.177 0.754

Zn 0.585 0.677 0.754

Zn 0.418 0.305 0.754

Zn 0.085 0.805 0.754

Zn 0.793 0.177 0.504

Zn 0.957 0.680 0.504

Zn 0.710 0.677 0.504

Zn 0.457 0.801 0.504

Zn 0.046 0.301 0.504

Zn 0.546 0.180 0.504

Zn 0.293 0.305 0.504

Zn 0.210 0.805 0.504

Zn 0.669 0.175 0.254

Zn 0.169 0.306 0.254

Zn 0.918 0.177 0.254

Zn 0.834 0.675 0.254

Zn 0.334 0.806 0.254

Zn 0.585 0.677 0.254

Zn 0.418 0.305 0.254

Zn 0.085 0.805 0.254

Zn 0.957 0.680 0.004

Zn 0.793 0.177 0.004

Zn 0.710 0.677 0.004

Zn 0.457 0.801 0.004

Zn 0.046 0.301 0.004

Zn 0.293 0.305 0.004

Zn 0.210 0.805 0.004

Zn 0.546 0.180 0.004

O 0.586 0.299 0.754

O 0.335 0.183 0.754

O 0.169 0.683 0.754

O 0.917 0.799 0.754

O 0.835 0.299 0.754

O 0.669 0.799 0.754

O 0.417 0.682 0.754

O 0.086 0.182 0.754

O 0.545 0.795 0.504
O 0.710 0.299 0.504
O 0.458 0.187 0.504
O 0.293 0.683 0.504
O 0.210 0.182 0.504
O 0.793 0.799 0.504
O 0.958 0.294 0.504
O 0.045 0.687 0.504
O 0.586 0.299 0.254
O 0.335 0.183 0.254
O 0.169 0.683 0.254
O 0.917 0.799 0.254
O 0.835 0.299 0.254
O 0.669 0.799 0.254
O 0.417 0.682 0.254
O 0.086 0.182 0.254
O 0.545 0.795 0.004
O 0.710 0.299 0.004
O 0.458 0.187 0.004
O 0.293 0.683 0.004
O 0.210 0.182 0.004
O 0.793 0.799 0.004
O 0.958 0.294 0.004
O 0.045 0.687 0.004

Str 11 (59_3_250)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: -0.01 eV

E_{rel} : 0.02 eV/ZnO

Pore_{max}: 0.18 nm

V_{pore}: 1 %

D_{pore}: 1

cell parameters

17.069 5.342 3.288 90.00 90.00 90.00

fractional coordinates

Zn 0.443 0.793 0.771

Zn 0.114 0.797 0.770

Zn 0.226 0.300 0.770

Zn 0.891 0.167 0.770

Zn 0.779 0.665 0.770

Zn 0.561 0.172 0.770

Zn 0.279 0.800 0.271

Zn 0.391 0.298 0.271

Zn 0.943 0.672 0.270

Zn 0.061 0.292 0.270

Zn 0.614 0.668 0.270

Zn 0.725 0.165 0.270

O 0.225 0.676 0.771

O 0.444 0.178 0.771

O 0.890 0.791 0.770

O 0.114 0.173 0.770

O 0.561 0.787 0.770

O 0.780 0.289 0.770

O 0.390 0.674 0.271
O 0.061 0.677 0.270
O 0.280 0.176 0.270
O 0.944 0.287 0.270
O 0.725 0.789 0.270
O 0.614 0.291 0.270

Str 12 (59_4_280312)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.00 eV

E_{rel} : 0.03 eV/ZnO

Pore_{max}: 0.18 nm

V_{pore}: 1 %

D_{pore}: 1

cell parameters

11.372 5.375 6.586 90.00 90.00 90.00

fractional coordinates

Zn 0.835 0.322 0.750

Zn 0.665 0.822 0.750

Zn 0.335 0.189 0.750

Zn 0.165 0.689 0.750

Zn 0.911 0.818 0.500

Zn 0.589 0.318 0.500

Zn 0.411 0.694 0.500

Zn 0.089 0.194 0.500

Zn 0.835 0.322 0.250

Zn 0.665 0.822 0.250

Zn 0.335 0.189 0.250

Zn 0.165 0.689 0.250

Zn 0.911 0.818 0.000

Zn 0.589 0.318 0.000

Zn 0.411 0.694 0.000

Zn 0.089 0.194 0.000

O 0.833 0.696 0.750

O 0.668 0.196 0.750

O 0.333 0.815 0.750

O 0.168 0.315 0.750

O 0.913 0.200 0.500

O 0.587 0.700 0.500

O 0.413 0.311 0.500

O 0.087 0.811 0.500

O 0.833 0.696 0.250

O 0.668 0.196 0.250

O 0.333 0.815 0.250

O 0.168 0.315 0.250

O 0.913 0.200 0.000

O 0.587 0.700 0.000

O 0.413 0.311 0.000

O 0.087 0.811 0.000

Str 13

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.03 eV

E_{rel} : 0.06 eV/ZnO

Pore_{max}: 0.19 nm

V_{pore}: 2 %

D_{pore}: 1

cell parameters

6.601 13.178 5.389 89.86 90.00 59.94

fractional coordinates

Zn 0.149 0.591 0.726

Zn 0.148 0.841 0.725

Zn 0.649 0.841 0.725

Zn 0.653 0.586 0.606

Zn 0.644 0.096 0.599

Zn 0.145 0.338 0.599

Zn 0.659 0.338 0.599

Zn 0.146 0.094 0.598

Zn 0.819 0.920 0.223

Zn 0.306 0.676 0.222

Zn 0.820 0.677 0.222

Zn 0.322 0.918 0.222

Zn 0.312 0.428 0.215

Zn 0.316 0.173 0.096

Zn 0.817 0.173 0.096

Zn 0.816 0.424 0.095

O 0.316 0.173 0.721

O 0.818 0.173 0.721

O 0.817 0.422 0.721

O 0.313 0.427 0.614

O 0.820 0.676 0.605

O 0.307 0.676 0.605

O 0.819 0.921 0.605

O 0.321 0.919 0.604

O 0.644 0.096 0.217

O 0.146 0.093 0.216

O 0.145 0.338 0.216

O 0.658 0.338 0.216

O 0.652 0.587 0.208

O 0.148 0.592 0.100

O 0.650 0.841 0.100

O 0.148 0.841 0.100

Str 14 (59_4_253313)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.00 eV

E_{rel}: 0.05 eV/ZnO

Pore_{max}: 0.18 nm

V_{pore}: 2 %

D_{pore}: 1

cell parameters

22.669 5.462 6.584 90.02 89.99 89.99

fractional coordinates

Zn 0.078 0.683 0.752

Zn 0.417 0.183 0.752

Zn 0.578 0.812 0.752

Zn 0.917 0.312 0.752

Zn 0.668 0.185 0.752
Zn 0.327 0.811 0.752
Zn 0.168 0.311 0.752
Zn 0.827 0.684 0.752
Zn 0.452 0.682 0.502
Zn 0.042 0.182 0.502
Zn 0.290 0.313 0.502
Zn 0.952 0.813 0.502
Zn 0.790 0.182 0.502
Zn 0.705 0.682 0.502
Zn 0.205 0.813 0.502
Zn 0.543 0.313 0.502
Zn 0.078 0.683 0.252
Zn 0.417 0.183 0.252
Zn 0.917 0.312 0.252
Zn 0.578 0.812 0.252
Zn 0.668 0.185 0.252
Zn 0.327 0.811 0.252
Zn 0.168 0.311 0.252
Zn 0.827 0.684 0.252
Zn 0.452 0.682 0.002
Zn 0.042 0.182 0.002
Zn 0.290 0.313 0.002
Zn 0.205 0.813 0.002
Zn 0.952 0.813 0.002
Zn 0.790 0.182 0.002
Zn 0.705 0.682 0.002
Zn 0.543 0.313 0.002
O 0.416 0.809 0.752
O 0.079 0.308 0.752
O 0.667 0.810 0.752
O 0.828 0.309 0.752
O 0.916 0.687 0.752
O 0.328 0.186 0.752
O 0.167 0.686 0.752
O 0.579 0.187 0.752
O 0.042 0.808 0.502
O 0.453 0.309 0.502
O 0.542 0.687 0.502
O 0.953 0.186 0.502
O 0.706 0.313 0.502
O 0.289 0.682 0.502
O 0.789 0.813 0.502
O 0.206 0.182 0.502
O 0.416 0.809 0.252
O 0.079 0.308 0.252
O 0.828 0.309 0.252
O 0.667 0.810 0.252
O 0.916 0.687 0.252
O 0.328 0.186 0.252
O 0.167 0.686 0.252
O 0.579 0.187 0.252

O 0.042 0.808 0.002
O 0.453 0.309 0.002
O 0.542 0.687 0.002
O 0.953 0.186 0.002
O 0.706 0.313 0.002
O 0.289 0.682 0.002
O 0.789 0.813 0.002
O 0.206 0.182 0.002

Str 15

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.06 eV

E_{rel} : 0.08 eV/ZnO

Pore_{max}: 0.19 nm

V_{pore}: 2 %

D_{pore}: 1

cell parameters

9.962 9.921 5.371 89.63 90.00 120.14

fractional coordinates

Zn 0.895 0.441 0.817

Zn 0.561 0.441 0.817

Zn 0.228 0.441 0.817

Zn 0.558 0.101 0.703

Zn 0.891 0.101 0.702

Zn 0.224 0.101 0.702

Zn 0.896 0.778 0.690

Zn 0.563 0.778 0.690

Zn 0.230 0.778 0.690

Zn 0.780 0.545 0.315

Zn 0.446 0.545 0.315

Zn 0.113 0.545 0.315

Zn 0.785 0.222 0.302

Zn 0.452 0.222 0.302

Zn 0.118 0.222 0.302

Zn 0.782 0.882 0.188

Zn 0.115 0.882 0.188

Zn 0.448 0.882 0.188

O 0.781 0.881 0.811

O 0.114 0.881 0.811

O 0.448 0.881 0.811

O 0.785 0.221 0.709

O 0.451 0.221 0.709

O 0.118 0.222 0.709

O 0.780 0.545 0.698

O 0.447 0.545 0.698

O 0.113 0.545 0.698

O 0.896 0.778 0.307

O 0.563 0.778 0.307

O 0.230 0.778 0.307

O 0.558 0.101 0.297

O 0.891 0.102 0.296

O 0.225 0.102 0.296

O 0.895 0.442 0.194

O 0.562 0.442 0.194
O 0.228 0.442 0.193

Str 16 (189_3_1615)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.07 eV

E_{rel} : 0.08 eV/ZnO

Pore_{max}: 0.23 nm

V_{pore} : 2 %

D_{pore} : 1

cell parameters

9.924 9.925 5.395 90.00 90.00 120.00

fractional coordinates

Zn 0.888 0.437 0.817

Zn 0.563 0.437 0.817

Zn 0.563 0.111 0.817

Zn 0.890 0.766 0.805

Zn 0.890 0.109 0.805

Zn 0.233 0.109 0.805

Zn 0.558 0.771 0.689

Zn 0.228 0.771 0.689

Zn 0.228 0.442 0.689

Zn 0.781 0.548 0.319

Zn 0.781 0.218 0.319

Zn 0.452 0.218 0.319

Zn 0.776 0.881 0.203

Zn 0.119 0.881 0.203

Zn 0.119 0.223 0.203

Zn 0.446 0.878 0.192

Zn 0.446 0.553 0.192

Zn 0.121 0.553 0.192

O 0.447 0.879 0.811

O 0.447 0.553 0.811

O 0.121 0.553 0.811

O 0.119 0.881 0.800

O 0.119 0.223 0.800

O 0.776 0.881 0.800

O 0.781 0.548 0.694

O 0.781 0.218 0.694

O 0.452 0.218 0.694

O 0.558 0.771 0.315

O 0.228 0.771 0.315

O 0.228 0.442 0.315

O 0.890 0.766 0.208

O 0.890 0.109 0.208

O 0.233 0.109 0.208

O 0.563 0.437 0.198

O 0.889 0.437 0.198

O 0.563 0.111 0.198

Str 17

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.04 eV

E_{rel} : 0.08 eV/ZnO

Pore_{max}: 0.19 nm

V_{pore}: 2 %

D_{pore}: 1

cell parameters

22.823 5.416 6.631 90.02 89.99 90.33

fractional coordinates

Zn 0.422 0.303 0.754

Zn 0.582 0.679 0.754

Zn 0.837 0.696 0.754

Zn 0.332 0.674 0.754

Zn 0.919 0.181 0.754

Zn 0.084 0.814 0.754

Zn 0.671 0.311 0.754

Zn 0.167 0.297 0.754

Zn 0.547 0.176 0.505

Zn 0.294 0.177 0.504

Zn 0.212 0.694 0.504

Zn 0.791 0.297 0.504

Zn 0.958 0.683 0.504

Zn 0.046 0.312 0.504

Zn 0.709 0.811 0.504

Zn 0.457 0.805 0.504

Zn 0.422 0.303 0.255

Zn 0.582 0.679 0.254

Zn 0.837 0.696 0.254

Zn 0.332 0.674 0.254

Zn 0.919 0.181 0.254

Zn 0.084 0.814 0.254

Zn 0.671 0.311 0.254

Zn 0.167 0.297 0.254

Zn 0.547 0.176 0.005

Zn 0.294 0.177 0.004

Zn 0.212 0.694 0.004

Zn 0.958 0.683 0.004

Zn 0.791 0.297 0.004

Zn 0.046 0.312 0.004

Zn 0.709 0.811 0.004

Zn 0.457 0.805 0.004

O 0.583 0.300 0.755

O 0.333 0.297 0.754

O 0.167 0.701 0.754

O 0.919 0.807 0.754

O 0.837 0.292 0.754

O 0.084 0.187 0.754

O 0.421 0.682 0.754

O 0.670 0.688 0.754

O 0.545 0.799 0.505

O 0.458 0.183 0.504

O 0.791 0.701 0.504

O 0.295 0.802 0.504

O 0.958 0.304 0.504

O 0.045 0.692 0.504

O 0.709 0.185 0.504
O 0.212 0.291 0.504
O 0.583 0.300 0.255
O 0.333 0.297 0.254
O 0.167 0.701 0.254
O 0.919 0.807 0.254
O 0.837 0.292 0.254
O 0.084 0.187 0.254
O 0.421 0.682 0.254
O 0.670 0.688 0.254
O 0.545 0.799 0.005
O 0.458 0.183 0.004
O 0.791 0.701 0.004
O 0.295 0.802 0.004
O 0.958 0.304 0.004
O 0.045 0.692 0.004
O 0.709 0.185 0.004
O 0.212 0.291 0.004

Str 18 (SSCCCC)¹⁶

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.08 eV

E_{rel} : 0.09 eV/ZnO

Pore_{max}: 0.19 nm

V_{pore} : 3 %

D_{pore} : 0

cell parameters

11.462 5.320 3.331 89.99 90.00 90.00

fractional coordinates

Zn 0.278 0.187 0.920

Zn 0.615 0.804 0.919

Zn 0.778 0.285 0.919

Zn 0.115 0.667 0.919

Zn 0.370 0.785 0.420

Zn 0.533 0.304 0.420

Zn 0.033 0.168 0.419

Zn 0.870 0.687 0.419

O 0.279 0.778 0.920

O 0.613 0.183 0.919

O 0.114 0.289 0.919

O 0.779 0.694 0.919

O 0.369 0.193 0.419

O 0.535 0.683 0.419

O 0.869 0.278 0.419

O 0.035 0.789 0.419

Str 19

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.11 eV

E_{rel} : 0.10 eV/ZnO

Pore_{max}: 0.23 nm

V_{pore} : 3 %

D_{pore} : 1

cell parameters

8.769 6.624 5.461 89.98 90.03 79.20

fractional coordinates

Zn 0.556 0.617 0.996

Zn 0.889 0.294 0.994

Zn 0.560 0.116 0.873

Zn 0.217 0.943 0.873

Zn 0.218 0.457 0.872

Zn 0.889 0.792 0.861

Zn 0.773 0.553 0.495

Zn 0.444 0.887 0.482

Zn 0.102 0.228 0.481

Zn 0.445 0.401 0.481

Zn 0.773 0.050 0.361

Zn 0.106 0.727 0.359

O 0.106 0.727 0.988

O 0.775 0.055 0.986

O 0.445 0.401 0.879

O 0.445 0.887 0.878

O 0.103 0.229 0.878

O 0.773 0.557 0.870

O 0.889 0.787 0.486

O 0.559 0.116 0.476

O 0.217 0.457 0.475

O 0.217 0.943 0.475

O 0.887 0.290 0.369

O 0.556 0.617 0.366

Str 20

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.13 eV

E_{rel} : 0.13 eV/ZnO

Pore_{max} : 0.22 nm

V_{pore} : 3 %

D_{pore} : 1

cell parameters

6.671 6.671 5.373 90.00 90.00 120.00

fractional coordinates

Zn 0.825 0.648 0.961

Zn 0.825 0.158 0.961

Zn 0.335 0.158 0.961

Zn 0.655 0.818 0.562

Zn 0.165 0.818 0.562

Zn 0.165 0.328 0.562

Zn 0.662 0.321 0.446

Zn 0.329 0.655 0.077

O 0.655 0.818 0.967

O 0.166 0.818 0.967

O 0.166 0.329 0.967

O 0.825 0.647 0.555

O 0.825 0.158 0.555

O 0.336 0.158 0.555

O 0.329 0.655 0.454

O 0.662 0.321 0.068

Str 21 (BCT)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.03 eV

E_{rel} : 0.05 eV/ZnO

Pore_{max}: 0.16 nm

V_{pore} : 3 %

D_{pore} : 1

cell parameters

7.925 7.925 3.287 90.00 90.00 90.00

fractional coordinates

Zn 0.503 0.818 0.500

Zn 0.503 0.182 0.500

Zn 0.003 0.682 0.500

Zn 0.003 0.318 0.500

Zn 0.821 0.000 0.000

Zn 0.685 0.500 0.000

Zn 0.321 0.500 0.000

Zn 0.185 0.000 0.000

O 0.821 0.500 0.500

O 0.685 0.000 0.500

O 0.321 0.000 0.500

O 0.185 0.500 0.500

O 0.503 0.682 0.000

O 0.503 0.318 0.000

O 0.003 0.818 0.000

O 0.003 0.182 0.000

Str 22

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.07 eV

E_{rel} : 0.07 eV/ZnO

Pore_{max}: 0.19 nm

V_{pore} : 3 %

D_{pore} : 1

cell parameters

8.711 6.587 5.484 90.16 90.17 79.25

fractional coordinates

Zn 0.780 0.034 0.874

Zn 0.780 0.534 0.874

Zn 0.458 0.856 0.874

Zn 0.340 0.154 0.507

Zn 0.017 0.976 0.507

Zn 0.018 0.475 0.506

Zn 0.347 0.654 0.380

Zn 0.686 0.307 0.378

Zn 0.678 0.810 0.371

Zn 0.119 0.199 0.009

Zn 0.112 0.702 0.003

Zn 0.451 0.357 0.001

O 0.345 0.649 0.993

O 0.339 0.149 0.881

O 0.015 0.474 0.881

O 0.015 0.977 0.881

O 0.782 0.032 0.500
O 0.459 0.862 0.500
O 0.783 0.536 0.500
O 0.453 0.361 0.388
O 0.114 0.702 0.380
O 0.120 0.199 0.377
O 0.678 0.810 0.003
O 0.684 0.308 0.001

Str 23 (-LIT)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.12 eV

E_{rel} : 0.10 eV/ZnO

Pore_{max} : 0.20 nm

V_{pore} : 5 %

D_{pore} : 1

cell parameters

9.891 5.586 5.716 90.00 90.00 90.00

fractional coordinates

Zn 0.994 0.935 0.840

Zn 0.670 0.933 0.831

Zn 0.332 0.065 0.817

Zn 0.832 0.435 0.683

Zn 0.170 0.567 0.669

Zn 0.494 0.565 0.660

Zn 0.506 0.065 0.340

Zn 0.830 0.067 0.331

Zn 0.168 0.935 0.317

Zn 0.668 0.565 0.183

Zn 0.330 0.433 0.169

Zn 0.006 0.435 0.160

O 0.995 0.563 0.838

O 0.668 0.558 0.834

O 0.332 0.436 0.818

O 0.832 0.064 0.682

O 0.168 0.942 0.666

O 0.495 0.937 0.662

O 0.505 0.437 0.338

O 0.832 0.442 0.334

O 0.168 0.564 0.318

O 0.668 0.936 0.182

O 0.332 0.058 0.166

O 0.005 0.063 0.162

Str 24 (64_2_7619)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.14 eV

E_{rel} : 0.11 eV/ZnO

Pore_{max} : 0.20 nm

V_{pore} : 5 %

D_{pore} : 2

cell parameters

5.630 6.563 11.501 90.00 90.00 90.00

fractional coordinates

Zn 0.803 0.003 0.914
Zn 0.673 0.503 0.914
Zn 0.307 0.231 0.830
Zn 0.169 0.731 0.830
Zn 0.807 0.231 0.669
Zn 0.669 0.731 0.669
Zn 0.303 0.003 0.586
Zn 0.173 0.503 0.586
Zn 0.803 0.489 0.414
Zn 0.673 0.989 0.414
Zn 0.307 0.260 0.330
Zn 0.169 0.760 0.330
Zn 0.807 0.260 0.169
Zn 0.669 0.760 0.169
Zn 0.303 0.489 0.086
Zn 0.173 0.989 0.086
O 0.296 0.497 0.915
O 0.180 0.997 0.915
O 0.803 0.735 0.829
O 0.674 0.235 0.829
O 0.303 0.735 0.671
O 0.174 0.235 0.671
O 0.796 0.497 0.585
O 0.680 0.997 0.585
O 0.296 0.994 0.415
O 0.180 0.494 0.415
O 0.803 0.757 0.329
O 0.674 0.257 0.329
O 0.303 0.757 0.171
O 0.174 0.257 0.171
O 0.796 0.994 0.085
O 0.680 0.494 0.085

Str 25 (64_2_5457)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.18 eV

E_{rel} : 0.11 eV/ZnO

Pore_{max}: 0.20 nm

V_{pore} : 5 %

D_{pore} : 2

cell parameters

5.647 13.252 5.680 90.00 90.00 90.00

fractional coordinates

Zn 0.305 0.691 0.907

Zn 0.173 0.191 0.907

Zn 0.170 0.935 0.902

Zn 0.308 0.435 0.902

Zn 0.808 0.435 0.595

Zn 0.670 0.935 0.595

Zn 0.673 0.191 0.591

Zn 0.805 0.692 0.591

Zn 0.305 0.806 0.407

Zn 0.173 0.306 0.407

Zn 0.308 0.062 0.402
Zn 0.171 0.562 0.402
Zn 0.807 0.062 0.095
Zn 0.671 0.562 0.095
Zn 0.673 0.306 0.091
Zn 0.805 0.806 0.091
O 0.807 0.191 0.911
O 0.671 0.691 0.910
O 0.797 0.935 0.910
O 0.681 0.435 0.910
O 0.297 0.935 0.587
O 0.181 0.435 0.587
O 0.307 0.191 0.587
O 0.171 0.691 0.587
O 0.807 0.306 0.411
O 0.671 0.806 0.411
O 0.798 0.562 0.410
O 0.680 0.062 0.410
O 0.180 0.062 0.087
O 0.297 0.562 0.087
O 0.171 0.806 0.087
O 0.307 0.306 0.087

Str 26 (AEN)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.21 eV

E_{rel} : 0.12 eV/ZnO

Pore_{max}: 0.24 nm

V_{pore}: 5 %

D_{pore}: 1

cell parameters

6.690 8.692 10.869 90.00 90.01 90.00

fractional coordinates

Zn 0.872 0.509 0.938

Zn 0.372 0.509 0.938

Zn 0.622 0.821 0.836

Zn 0.122 0.821 0.836

Zn 0.622 0.197 0.836

Zn 0.122 0.197 0.836

Zn 0.872 0.697 0.645

Zn 0.372 0.697 0.645

Zn 0.872 0.321 0.645

Zn 0.372 0.321 0.645

Zn 0.622 0.009 0.544

Zn 0.122 0.009 0.544

Zn 0.622 0.509 0.438

Zn 0.122 0.509 0.438

Zn 0.872 0.197 0.336

Zn 0.372 0.197 0.336

Zn 0.872 0.821 0.336

Zn 0.372 0.821 0.336

Zn 0.622 0.321 0.145

Zn 0.122 0.321 0.145

Zn 0.622 0.697 0.145
Zn 0.122 0.697 0.145
Zn 0.872 0.009 0.044
Zn 0.372 0.009 0.044
O 0.622 0.009 0.936
O 0.122 0.009 0.936
O 0.872 0.697 0.837
O 0.872 0.321 0.837
O 0.372 0.697 0.837
O 0.372 0.321 0.837
O 0.122 0.821 0.644
O 0.622 0.821 0.644
O 0.622 0.197 0.644
O 0.122 0.197 0.644
O 0.872 0.509 0.545
O 0.372 0.509 0.545
O 0.872 0.009 0.436
O 0.372 0.009 0.436
O 0.622 0.321 0.337
O 0.122 0.321 0.337
O 0.622 0.697 0.337
O 0.122 0.697 0.337
O 0.872 0.197 0.144
O 0.372 0.197 0.144
O 0.872 0.821 0.144
O 0.372 0.821 0.144
O 0.622 0.509 0.045
O 0.122 0.509 0.045

Str 27 (ATV)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.20 eV

E_{rel} : 0.13 eV/ZnO

Pore_{max} : 0.23 nm

V_{pore} : 6 %

D_{pore} : 1

cell parameters

5.280 10.095 5.895 90.00 90.00 90.00

fractional coordinates

Zn 0.811 0.250 0.840

Zn 0.311 0.750 0.840

Zn 0.811 0.906 0.666

Zn 0.811 0.594 0.666

Zn 0.311 0.406 0.666

Zn 0.311 0.094 0.666

Zn 0.811 0.406 0.334

Zn 0.811 0.094 0.334

Zn 0.311 0.906 0.334

Zn 0.311 0.594 0.334

Zn 0.811 0.750 0.160

Zn 0.311 0.250 0.160

O 0.692 0.750 0.837

O 0.192 0.250 0.837

O 0.688 0.406 0.671
O 0.688 0.094 0.671
O 0.188 0.906 0.671
O 0.188 0.594 0.671
O 0.688 0.906 0.329
O 0.688 0.594 0.329
O 0.188 0.406 0.329
O 0.188 0.094 0.329
O 0.692 0.250 0.163
O 0.192 0.750 0.163

Str 28 (JBW)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.20 eV

E_{rel} : 0.19 eV/ZnO

Pore_{max}: 0.21 nm

V_{pore}: 7 %

D_{pore}: 1

cell parameters

3.353 10.166 4.751 90.00 90.00 90.00

fractional coordinates

Zn 0.750 0.608 0.893

Zn 0.750 0.904 0.893

Zn 0.750 0.256 0.610

Zn 0.250 0.756 0.389

Zn 0.250 0.405 0.106

Zn 0.250 0.108 0.106

O 0.750 0.408 0.871

O 0.750 0.104 0.871

O 0.750 0.756 0.626

O 0.250 0.256 0.374

O 0.250 0.604 0.128

O 0.250 0.908 0.128

Str 29 (SSCSSC)¹⁶

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.31 eV

E_{rel} : 0.15 eV/ZnO

Pore_{max}: 0.22 nm

V_{pore}: 10 %

D_{pore}: 1

cell parameters

5.534 3.365 6.051 90.00 89.99 89.99

fractional coordinates

Zn 0.062 0.108 0.727

Zn 0.562 0.608 0.573

Zn 0.363 0.108 0.227

Zn 0.863 0.608 0.073

O 0.869 0.608 0.725

O 0.369 0.108 0.576

O 0.557 0.608 0.225

O 0.056 0.108 0.076

Str 30 (ABW)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.30 eV

E_{rel} : 0.15 eV/ZnO

Pore_{max}: 0.22 nm

V_{pore} : 10 %

D_{pore} : 1

cell parameters

12.188 6.707 11.061 90.00 90.00 90.00

fractional coordinates

Zn 0.912 0.500 0.998

Zn 0.912 0.000 0.998

Zn 0.412 0.500 0.998

Zn 0.412 0.000 0.998

Zn 0.585 0.750 0.899

Zn 0.585 0.250 0.899

Zn 0.085 0.750 0.899

Zn 0.085 0.250 0.899

Zn 0.835 0.750 0.748

Zn 0.835 0.250 0.748

Zn 0.335 0.750 0.748

Zn 0.335 0.250 0.748

Zn 0.662 0.500 0.649

Zn 0.662 0.000 0.649

Zn 0.162 0.500 0.649

Zn 0.162 0.000 0.649

Zn 0.912 0.500 0.498

Zn 0.912 0.000 0.498

Zn 0.412 0.500 0.498

Zn 0.412 0.000 0.498

Zn 0.585 0.750 0.399

Zn 0.585 0.250 0.399

Zn 0.085 0.750 0.399

Zn 0.085 0.250 0.399

Zn 0.835 0.750 0.248

Zn 0.835 0.250 0.248

Zn 0.335 0.750 0.248

Zn 0.335 0.250 0.248

Zn 0.662 0.500 0.149

Zn 0.662 0.000 0.149

Zn 0.162 0.500 0.149

Zn 0.162 0.000 0.149

O 0.585 0.500 0.997

O 0.585 0.000 0.997

O 0.085 0.500 0.997

O 0.085 0.000 0.997

O 0.912 0.750 0.900

O 0.912 0.250 0.900

O 0.412 0.750 0.900

O 0.412 0.250 0.900

O 0.662 0.750 0.747

O 0.662 0.250 0.747

O 0.162 0.750 0.747

O 0.162 0.250 0.747

O 0.835 0.500 0.650
O 0.835 0.000 0.650
O 0.335 0.500 0.650
O 0.335 0.000 0.650
O 0.585 0.500 0.497
O 0.585 0.000 0.497
O 0.085 0.500 0.497
O 0.085 0.000 0.497
O 0.912 0.750 0.400
O 0.912 0.250 0.400
O 0.412 0.750 0.400
O 0.412 0.250 0.400
O 0.662 0.750 0.247
O 0.662 0.250 0.247
O 0.162 0.750 0.247
O 0.162 0.250 0.247
O 0.835 0.500 0.150
O 0.835 0.000 0.150
O 0.335 0.500 0.150
O 0.335 0.000 0.150

Str 31 (DFT)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.35 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max} : 0.23 nm

V_{pore} : 10 %

D_{pore} : 1

cell parameters

8.631 8.631 8.907 57.08 122.92 96.99

fractional coordinates

Zn 0.710 0.449 0.862

Zn 0.210 0.949 0.862

Zn 0.818 0.840 0.862

Zn 0.318 0.340 0.862

Zn 0.715 0.795 0.521

Zn 0.323 0.686 0.521

Zn 0.823 0.186 0.521

Zn 0.215 0.295 0.521

Zn 0.494 0.516 0.362

Zn 0.994 0.016 0.362

Zn 0.885 0.624 0.362

Zn 0.385 0.124 0.362

Zn 0.539 0.619 0.021

Zn 0.039 0.119 0.021

Zn 0.648 0.011 0.021

Zn 0.148 0.511 0.021

O 0.883 0.624 0.865

O 0.383 0.124 0.865

O 0.997 0.011 0.865

O 0.496 0.511 0.865

O 0.536 0.624 0.519

O 0.036 0.124 0.519

O 0.649 0.011 0.519
O 0.149 0.511 0.519
O 0.823 0.837 0.365
O 0.323 0.337 0.365
O 0.709 0.450 0.365
O 0.209 0.951 0.365
O 0.824 0.184 0.019
O 0.324 0.684 0.019
O 0.710 0.797 0.019
O 0.210 0.297 0.019

Str 32 (SSSCSC)¹⁶

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.36 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max}: 0.23 nm

V_{pore}: 10 %

D_{pore}: 1

cell parameters

5.714 6.466 6.134 90.02 90.02 89.96

fractional coordinates

Zn 0.037 0.071 0.727

Zn 0.537 0.787 0.727

Zn 0.537 0.287 0.568

Zn 0.037 0.571 0.568

Zn 0.887 0.287 0.227

Zn 0.387 0.570 0.227

Zn 0.387 0.070 0.068

Zn 0.887 0.787 0.068

O 0.386 0.066 0.725

O 0.886 0.792 0.725

O 0.886 0.292 0.570

O 0.386 0.566 0.570

O 0.538 0.292 0.225

O 0.037 0.565 0.224

O 0.037 0.065 0.070

O 0.537 0.792 0.070

Str 33 (135_1_4)¹⁸

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.32 eV

E_{rel} : 0.15 eV/ZnO

Pore_{max}: 0.28 nm

V_{pore}: 10 %

D_{pore}: 1

cell parameters

6.471 6.471 5.285 90.00 90.00 90.00

fractional coordinates

Zn 0.832 0.148 0.700

Zn 0.633 0.648 0.700

Zn 0.332 0.347 0.700

Zn 0.133 0.847 0.700

Zn 0.832 0.847 0.200

Zn 0.633 0.347 0.200

Zn 0.332 0.648 0.200
Zn 0.133 0.148 0.200
O 0.633 0.347 0.821
O 0.833 0.847 0.821
O 0.333 0.648 0.821
O 0.133 0.148 0.821
O 0.133 0.848 0.321
O 0.332 0.348 0.321
O 0.832 0.148 0.321
O 0.633 0.648 0.321

Str 34 (AEL)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.28 eV

E_{rel} : 0.16 eV/ZnO

Pore_{max}: 0.32 nm

V_{pore} : 11 %

D_{pore} : 1

cell parameters

8.832 11.915 5.285 90.01 90.02 89.99

fractional coordinates

Zn 0.526 0.115 0.810
Zn 0.438 0.615 0.810
Zn 0.526 0.393 0.810
Zn 0.438 0.893 0.810
Zn 0.119 0.754 0.810
Zn 0.844 0.254 0.810
Zn 0.835 0.966 0.808
Zn 0.835 0.542 0.808
Zn 0.128 0.466 0.808
Zn 0.128 0.042 0.808
Zn 0.938 0.115 0.310
Zn 0.026 0.615 0.310
Zn 0.026 0.893 0.310
Zn 0.938 0.393 0.310
Zn 0.619 0.254 0.310
Zn 0.344 0.754 0.310
Zn 0.335 0.466 0.308
Zn 0.335 0.042 0.308
Zn 0.628 0.966 0.308
Zn 0.628 0.542 0.308
O 0.341 0.754 0.691
O 0.622 0.254 0.691
O 0.939 0.116 0.687
O 0.939 0.392 0.687
O 0.024 0.892 0.687
O 0.024 0.616 0.687
O 0.628 0.542 0.686
O 0.334 0.466 0.686
O 0.334 0.042 0.686
O 0.628 0.966 0.686
O 0.841 0.254 0.191
O 0.122 0.754 0.191

O 0.439 0.616 0.187
O 0.524 0.392 0.187
O 0.439 0.892 0.187
O 0.524 0.116 0.187
O 0.128 0.042 0.186
O 0.834 0.966 0.186
O 0.835 0.542 0.186
O 0.128 0.466 0.186

Str 35 (APD)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.56 eV

E_{rel} : 0.22 eV/ZnO

Pore_{max}: 0.27 nm

V_{pore}: 12 %

D_{pore}: 1

cell parameters

5.281 13.064 6.545 90.00 90.00 90.00

fractional coordinates

Zn 0.312 0.202 0.902

Zn 0.188 0.702 0.902

Zn 0.801 0.052 0.897

Zn 0.699 0.552 0.897

Zn 0.301 0.052 0.603

Zn 0.199 0.552 0.603

Zn 0.812 0.202 0.598

Zn 0.688 0.702 0.598

Zn 0.312 0.298 0.402

Zn 0.188 0.798 0.402

Zn 0.801 0.448 0.397

Zn 0.699 0.948 0.397

Zn 0.301 0.448 0.103

Zn 0.199 0.948 0.103

Zn 0.812 0.298 0.098

Zn 0.688 0.798 0.098

O 0.809 0.701 0.899

O 0.691 0.201 0.899

O 0.301 0.553 0.898

O 0.199 0.053 0.898

O 0.801 0.553 0.602

O 0.699 0.053 0.602

O 0.309 0.701 0.601

O 0.191 0.201 0.601

O 0.809 0.799 0.399

O 0.691 0.299 0.399

O 0.301 0.947 0.398

O 0.199 0.447 0.398

O 0.801 0.947 0.102

O 0.699 0.447 0.102

O 0.309 0.799 0.101

O 0.191 0.299 0.101

Str 36 (LTJ)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.07 eV
 E_{rel} : 0.28 eV/ZnO
Pore_{max}: 0.24 nm
 V_{pore} : 12 %
 D_{pore} : 3
cell parameters
5.798 5.817 6.785 90.00 90.00 90.00
fractional coordinates
Zn 0.580 0.089 0.902
Zn 0.080 0.411 0.848
Zn 0.597 0.563 0.648
Zn 0.903 0.063 0.602
Zn 0.420 0.911 0.402
Zn 0.920 0.589 0.348
Zn 0.403 0.437 0.148
Zn 0.097 0.937 0.102
O 0.931 0.099 0.903
O 0.431 0.401 0.847
O 0.589 0.914 0.652
O 0.911 0.414 0.598
O 0.069 0.901 0.403
O 0.569 0.599 0.347
O 0.411 0.086 0.152
O 0.089 0.586 0.098

Str 37 (hUMQ)²⁰
 $\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.54 eV
 E_{rel} : 0.16 eV/ZnO
Pore_{max}: 0.26 nm
 V_{pore} : 12 %
 D_{pore} : 1
cell parameters
9.024 9.021 5.652 90.00 89.97 90.01
fractional coordinates
Zn 0.246 0.905 0.816
Zn 0.100 0.242 0.816
Zn 0.763 0.096 0.816
Zn 0.909 0.759 0.815
Zn 0.600 0.742 0.670
Zn 0.409 0.259 0.670
Zn 0.263 0.596 0.670
Zn 0.746 0.405 0.670
Zn 0.246 0.096 0.316
Zn 0.100 0.759 0.316
Zn 0.763 0.905 0.316
Zn 0.909 0.241 0.316
Zn 0.409 0.742 0.170
Zn 0.600 0.259 0.170
Zn 0.263 0.405 0.170
Zn 0.746 0.596 0.170
O 0.407 0.742 0.814
O 0.602 0.258 0.814

O 0.262 0.403 0.814
O 0.747 0.598 0.814
O 0.102 0.758 0.672
O 0.907 0.242 0.672
O 0.247 0.098 0.672
O 0.762 0.903 0.672
O 0.407 0.258 0.314
O 0.262 0.598 0.314
O 0.602 0.742 0.314
O 0.747 0.403 0.314
O 0.102 0.242 0.172
O 0.247 0.903 0.172
O 0.907 0.758 0.172
O 0.762 0.098 0.172

Str 38 (AFO)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.33 eV

E_{rel} : 0.19 eV/ZnO

Pore_{max}: 0.35 nm

V_{pore}: 12 %

D_{pore}: 1

cell parameters

6.268 9.045 5.264 90.00 90.00 110.27

fractional coordinates

Zn 0.559 0.118 0.599

Zn 0.588 0.739 0.598

Zn 0.151 0.739 0.598

Zn 0.177 0.355 0.592

Zn 0.721 0.442 0.591

Zn 0.452 0.905 0.099

Zn 0.860 0.284 0.098

Zn 0.424 0.284 0.098

Zn 0.834 0.668 0.092

Zn 0.291 0.582 0.091

O 0.560 0.121 0.980

O 0.593 0.745 0.976

O 0.178 0.356 0.976

O 0.152 0.745 0.976

O 0.722 0.445 0.970

O 0.451 0.902 0.480

O 0.418 0.278 0.476

O 0.833 0.667 0.476

O 0.860 0.278 0.476

O 0.289 0.578 0.470

Str 39 (ATO)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.23 eV

E_{rel} : 0.18 eV/ZnO

Pore_{max}: 0.34 nm

V_{pore}: 12 %

D_{pore}: 1

cell parameters

13.460 13.460 3.213 90.00 90.00 120.00

fractional coordinates

Zn 0.529 0.619 0.925

Zn 0.381 0.910 0.925

Zn 0.090 0.471 0.925

Zn 0.952 0.757 0.742

Zn 0.804 0.048 0.742

Zn 0.243 0.196 0.742

Zn 0.862 0.286 0.591

Zn 0.714 0.577 0.591

Zn 0.423 0.138 0.591

Zn 0.577 0.862 0.408

Zn 0.286 0.423 0.408

Zn 0.138 0.714 0.408

Zn 0.757 0.804 0.258

Zn 0.196 0.952 0.258

Zn 0.048 0.243 0.258

Zn 0.910 0.529 0.075

Zn 0.619 0.090 0.075

Zn 0.471 0.381 0.075

O 0.528 0.911 0.910

O 0.383 0.472 0.910

O 0.089 0.617 0.910

O 0.950 0.194 0.757

O 0.806 0.756 0.757

O 0.244 0.050 0.757

O 0.861 0.578 0.577

O 0.717 0.139 0.577

O 0.422 0.283 0.577

O 0.578 0.717 0.423

O 0.283 0.861 0.423

O 0.139 0.422 0.423

O 0.756 0.950 0.243

O 0.194 0.244 0.243

O 0.050 0.806 0.243

O 0.911 0.383 0.090

O 0.617 0.528 0.090

O 0.472 0.089 0.090

Str 40 (JRY)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.35 eV

E_{rel} : 0.28 eV/ZnO

Pore_{max}: 0.25 nm

V_{pore}: 12 %

D_{pore}: 1

cell parameters

5.328 5.868 10.876 90.00 90.00 90.00

fractional coordinates

Zn 0.583 0.595 0.981

Zn 0.133 0.374 0.922

Zn 0.581 0.091 0.824

Zn 0.419 0.591 0.676

Zn 0.867 0.874 0.578
Zn 0.417 0.095 0.519
Zn 0.917 0.405 0.481
Zn 0.367 0.626 0.422
Zn 0.919 0.909 0.324
Zn 0.081 0.409 0.176
Zn 0.633 0.126 0.078
Zn 0.083 0.905 0.019
O 0.439 0.904 0.975
O 0.896 0.127 0.916
O 0.441 0.416 0.826
O 0.559 0.916 0.674
O 0.104 0.627 0.584
O 0.561 0.404 0.525
O 0.061 0.096 0.475
O 0.604 0.873 0.416
O 0.059 0.584 0.326
O 0.941 0.084 0.174
O 0.396 0.373 0.084
O 0.939 0.596 0.025

Str 41 (OSI)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: -0.04 eV

E_{rel} : 0.16 eV/ZnO

Pore_{max} : 0.39 nm

V_{pore} : 12 %

D_{pore} : 1

cell parameters

11.732 11.602 3.376 90.00 90.00 90.00

fractional coordinates

Zn 0.715 0.848 0.500
Zn 0.715 0.157 0.500
Zn 0.619 0.502 0.500
Zn 0.381 0.502 0.500
Zn 0.285 0.848 0.500
Zn 0.285 0.157 0.500
Zn 0.000 0.786 0.500
Zn 0.000 0.219 0.500
Zn 0.881 0.002 0.000
Zn 0.785 0.657 0.000
Zn 0.785 0.348 0.000
Zn 0.500 0.719 0.000
Zn 0.500 0.286 0.000
Zn 0.215 0.657 0.000
Zn 0.215 0.348 0.000
Zn 0.119 0.002 0.000
O 0.847 0.714 0.500
O 0.847 0.291 0.500
O 0.788 0.002 0.500
O 0.500 0.626 0.500
O 0.500 0.379 0.500
O 0.212 0.002 0.500

O 0.153 0.714 0.500
O 0.153 0.291 0.500
O 0.712 0.502 0.000
O 0.653 0.791 0.000
O 0.653 0.214 0.000
O 0.347 0.791 0.000
O 0.347 0.214 0.000
O 0.288 0.502 0.000
O 0.000 0.879 0.000
O 0.000 0.126 0.000

Str 42 (MVY)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.26 eV

E_{rel} : 0.39 eV/ZnO

Pore_{max}: 0.25 nm

V_{pore}: 13 %

D_{pore}: 1

cell parameters

3.190 5.734 9.195 90.00 90.00 90.00

fractional coordinates

Zn 0.603 0.678 0.796

Zn 0.897 0.178 0.704

Zn 0.233 0.894 0.500

Zn 0.897 0.178 0.296

Zn 0.603 0.678 0.204

Zn 0.267 0.394 0.000

O 0.392 0.317 0.795

O 0.108 0.817 0.705

O 0.718 0.118 0.500

O 0.108 0.817 0.295

O 0.392 0.317 0.205

O 0.782 0.618 0.000

Str 43 AWO)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.50 eV

E_{rel} : 0.25 eV/ZnO

Pore_{max}: 0.27 nm

V_{pore}: 13 %

D_{pore}: 3

cell parameters

5.832 10.117 11.881 90.00 90.00 90.20

fractional coordinates

Zn 0.690 0.506 0.919

Zn 0.190 0.006 0.919

Zn 0.674 0.141 0.829

Zn 0.174 0.641 0.829

Zn 0.835 0.844 0.820

Zn 0.335 0.344 0.820

Zn 0.835 0.344 0.680

Zn 0.335 0.844 0.680

Zn 0.674 0.641 0.671

Zn 0.174 0.141 0.671

Zn 0.690 0.006 0.581
Zn 0.190 0.506 0.581
Zn 0.810 0.494 0.419
Zn 0.310 0.994 0.419
Zn 0.826 0.859 0.329
Zn 0.326 0.359 0.329
Zn 0.665 0.156 0.320
Zn 0.165 0.656 0.320
Zn 0.665 0.656 0.180
Zn 0.165 0.156 0.180
Zn 0.826 0.359 0.171
Zn 0.326 0.859 0.171
Zn 0.810 0.994 0.081
Zn 0.310 0.494 0.081
O 0.815 0.002 0.917
O 0.315 0.502 0.917
O 0.688 0.341 0.829
O 0.188 0.841 0.829
O 0.827 0.643 0.828
O 0.327 0.143 0.828
O 0.827 0.143 0.672
O 0.327 0.643 0.672
O 0.688 0.841 0.671
O 0.188 0.341 0.671
O 0.815 0.502 0.583
O 0.315 0.002 0.583
O 0.685 0.998 0.417
O 0.185 0.498 0.417
O 0.812 0.659 0.329
O 0.312 0.159 0.329
O 0.673 0.357 0.328
O 0.173 0.857 0.328
O 0.673 0.857 0.172
O 0.173 0.357 0.172
O 0.812 0.159 0.171
O 0.312 0.659 0.171
O 0.685 0.498 0.083
O 0.185 0.998 0.083

Str 44 (UEI)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.51 eV

E_{rel} : 0.25 eV/ZnO

Pore_{max}: 0.30 nm

V_{pore}: 13 %

D_{pore}: 3

cell parameters

11.887 5.859 10.095 90.00 90.00 90.00

fractional coordinates

Zn 0.821 0.333 0.840

Zn 0.679 0.833 0.840

Zn 0.321 0.167 0.840

Zn 0.179 0.667 0.840

Zn 0.828 0.672 0.636
Zn 0.672 0.172 0.636
Zn 0.328 0.828 0.636
Zn 0.172 0.328 0.636
Zn 0.919 0.189 0.501
Zn 0.581 0.689 0.501
Zn 0.419 0.311 0.501
Zn 0.081 0.811 0.501
Zn 0.821 0.833 0.340
Zn 0.679 0.333 0.340
Zn 0.321 0.667 0.340
Zn 0.179 0.167 0.340
Zn 0.828 0.172 0.136
Zn 0.672 0.672 0.136
Zn 0.328 0.328 0.136
Zn 0.172 0.828 0.136
Zn 0.919 0.689 0.001
Zn 0.581 0.189 0.001
Zn 0.419 0.811 0.001
Zn 0.081 0.311 0.001
O 0.917 0.315 0.999
O 0.583 0.815 0.999
O 0.417 0.185 0.999
O 0.083 0.685 0.999
O 0.828 0.684 0.837
O 0.672 0.184 0.837
O 0.328 0.816 0.837
O 0.172 0.316 0.837
O 0.828 0.327 0.639
O 0.672 0.827 0.639
O 0.328 0.173 0.639
O 0.172 0.673 0.639
O 0.917 0.815 0.499
O 0.583 0.315 0.499
O 0.417 0.685 0.499
O 0.083 0.185 0.499
O 0.828 0.184 0.337
O 0.672 0.684 0.337
O 0.328 0.316 0.337
O 0.172 0.816 0.337
O 0.828 0.827 0.139
O 0.672 0.327 0.139
O 0.328 0.673 0.139
O 0.172 0.173 0.139

Str 45 (ATN)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.61 eV

E_{rel} : 0.18 eV/ZnO

Pore_{max}: 0.34 nm

V_{pore} : 14 %

D_{pore} : 1

cell parameters

8.312 8.312 3.392 90.00 90.00 90.00

fractional coordinates

Zn 0.902 0.731 0.500

Zn 0.727 0.137 0.500

Zn 0.309 0.906 0.500

Zn 0.133 0.313 0.500

Zn 0.809 0.406 0.000

Zn 0.633 0.813 0.000

Zn 0.402 0.231 0.000

Zn 0.227 0.637 0.000

O 0.902 0.310 0.500

O 0.729 0.905 0.500

O 0.306 0.138 0.500

O 0.134 0.733 0.500

O 0.806 0.638 0.000

O 0.634 0.233 0.000

O 0.402 0.810 0.000

O 0.229 0.405 0.000

Str 46 (SAF)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.38 eV

E_{rel} : 0.20 eV/ZnO

Pore_{max} : 0.41 nm

V_{pore} : 14 %

D_{pore} : 1

cell parameters

9.513 18.309 5.260 90.00 90.00 90.00

fractional coordinates

Zn 0.902 0.777 0.695

Zn 0.598 0.277 0.695

Zn 0.402 0.723 0.695

Zn 0.098 0.223 0.695

Zn 0.786 0.136 0.692

Zn 0.714 0.636 0.692

Zn 0.286 0.364 0.692

Zn 0.214 0.864 0.692

Zn 0.895 0.948 0.688

Zn 0.605 0.448 0.688

Zn 0.395 0.552 0.688

Zn 0.105 0.052 0.688

Zn 0.899 0.330 0.686

Zn 0.601 0.830 0.686

Zn 0.399 0.170 0.686

Zn 0.101 0.670 0.686

Zn 0.902 0.223 0.195

Zn 0.598 0.723 0.195

Zn 0.402 0.277 0.195

Zn 0.098 0.777 0.195

Zn 0.786 0.864 0.192

Zn 0.714 0.364 0.192

Zn 0.286 0.636 0.192

Zn 0.214 0.136 0.192

Zn 0.895 0.052 0.188
Zn 0.605 0.552 0.188
Zn 0.395 0.448 0.188
Zn 0.105 0.948 0.188
Zn 0.899 0.670 0.186
Zn 0.601 0.170 0.186
Zn 0.399 0.830 0.186
Zn 0.101 0.330 0.186
O 0.897 0.222 0.815
O 0.603 0.722 0.815
O 0.397 0.278 0.815
O 0.103 0.778 0.815
O 0.893 0.051 0.808
O 0.606 0.551 0.808
O 0.394 0.449 0.808
O 0.106 0.949 0.808
O 0.787 0.863 0.808
O 0.713 0.363 0.808
O 0.287 0.637 0.808
O 0.213 0.137 0.808
O 0.902 0.667 0.808
O 0.598 0.167 0.808
O 0.402 0.833 0.808
O 0.098 0.333 0.808
O 0.897 0.778 0.315
O 0.603 0.278 0.315
O 0.397 0.722 0.315
O 0.103 0.222 0.315
O 0.893 0.949 0.308
O 0.606 0.449 0.308
O 0.394 0.551 0.308
O 0.106 0.051 0.308
O 0.787 0.137 0.308
O 0.713 0.637 0.308
O 0.287 0.363 0.308
O 0.213 0.863 0.308
O 0.902 0.333 0.308
O 0.598 0.833 0.308
O 0.402 0.167 0.308
O 0.098 0.667 0.308

Str 47 (APC)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.44 eV

E_{rel} : 0.23 eV/ZnO

Pore_{max}: 0.26 nm

V_{pore} : 14 %

D_{pore} : 3

cell parameters

5.788 12.765 6.464 90.00 90.00 90.00

fractional coordinates

Zn 0.328 0.711 0.895

Zn 0.172 0.211 0.895

Zn 0.824 0.048 0.881
Zn 0.676 0.548 0.881
Zn 0.324 0.048 0.619
Zn 0.176 0.548 0.619
Zn 0.828 0.711 0.605
Zn 0.672 0.211 0.605
Zn 0.328 0.789 0.395
Zn 0.172 0.289 0.395
Zn 0.824 0.452 0.381
Zn 0.676 0.952 0.381
Zn 0.324 0.452 0.119
Zn 0.176 0.952 0.119
Zn 0.828 0.789 0.105
Zn 0.672 0.289 0.105
O 0.317 0.549 0.890
O 0.183 0.049 0.890
O 0.822 0.211 0.888
O 0.678 0.711 0.888
O 0.322 0.211 0.612
O 0.178 0.711 0.612
O 0.817 0.549 0.610
O 0.683 0.049 0.610
O 0.317 0.951 0.390
O 0.183 0.451 0.390
O 0.822 0.289 0.388
O 0.678 0.789 0.388
O 0.322 0.289 0.112
O 0.178 0.789 0.112
O 0.817 0.951 0.110
O 0.683 0.451 0.110

Str 48 (CAN)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.48 eV

E_{rel} : 0.15 eV/ZnO

Pore_{max}: 0.33 nm

V_{pore} : 14 %

D_{pore} : 1

cell parameters

7.817 7.817 3.368 90.00 90.00 120.00

fractional coordinates

Zn 0.611 0.686 0.750

Zn 0.340 0.933 0.750

Zn 0.094 0.416 0.750

Zn 0.936 0.607 0.250

Zn 0.690 0.090 0.250

Zn 0.419 0.337 0.250

O 0.610 0.932 0.750

O 0.341 0.417 0.750

O 0.094 0.686 0.750

O 0.936 0.337 0.250

O 0.689 0.606 0.250

O 0.420 0.091 0.250

Str 49 (AFG)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.50 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max}: 0.33 nm

V_{pore} : 15 %

D_{pore} : 3

cell parameters

7.848 7.849 13.415 90.00 90.00 120.00

fractional coordinates

Zn 0.844 0.426 0.875

Zn 0.573 0.670 0.875

Zn 0.328 0.155 0.875

Zn 0.654 0.076 0.750

Zn 0.168 0.345 0.750

Zn 0.923 0.831 0.750

Zn 0.838 0.417 0.625

Zn 0.582 0.673 0.625

Zn 0.326 0.161 0.625

Zn 0.241 0.489 0.500

Zn 0.995 0.758 0.500

Zn 0.509 0.003 0.500

Zn 0.835 0.408 0.375

Zn 0.590 0.679 0.375

Zn 0.320 0.164 0.375

Zn 0.995 0.758 0.251

Zn 0.509 0.003 0.251

Zn 0.241 0.489 0.250

Zn 0.838 0.417 0.125

Zn 0.582 0.673 0.125

Zn 0.326 0.161 0.125

Zn 0.923 0.831 0.000

Zn 0.654 0.076 0.000

Zn 0.168 0.345 0.000

O 0.842 0.670 0.875

O 0.575 0.157 0.875

O 0.328 0.424 0.875

O 0.923 0.345 0.751

O 0.654 0.831 0.751

O 0.168 0.075 0.751

O 0.836 0.672 0.625

O 0.582 0.162 0.625

O 0.327 0.417 0.625

O 0.510 0.759 0.500

O 0.240 0.003 0.500

O 0.995 0.489 0.500

O 0.835 0.677 0.375

O 0.589 0.164 0.375

O 0.321 0.410 0.375

O 0.995 0.489 0.251

O 0.240 0.003 0.251

O 0.510 0.759 0.251

O 0.836 0.672 0.125
O 0.582 0.162 0.125
O 0.327 0.417 0.125
O 0.168 0.075 0.000
O 0.654 0.831 0.000
O 0.923 0.345 0.000

Str 50 (TOL)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.49 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max}: 0.33 nm

V_{pore}: 15 %

D_{pore}: 3

cell parameters

7.863 7.863 20.073 90.00 90.00 120.00

fractional coordinates

Zn 0.748 0.746 1.000

Zn 0.258 0.002 1.000

Zn 0.003 0.257 1.000

Zn 0.588 0.928 0.917

Zn 0.344 0.416 0.917

Zn 0.077 0.661 0.917

Zn 0.748 0.747 0.833

Zn 0.258 0.002 0.833

Zn 0.003 0.257 0.833

Zn 0.930 0.587 0.750

Zn 0.662 0.075 0.750

Zn 0.418 0.343 0.750

Zn 0.748 0.747 0.666

Zn 0.258 0.002 0.666

Zn 0.003 0.257 0.666

Zn 0.344 0.416 0.583

Zn 0.589 0.929 0.583

Zn 0.076 0.661 0.583

Zn 0.750 0.740 0.500

Zn 0.995 0.255 0.500

Zn 0.265 0.010 0.500

Zn 0.589 0.929 0.417

Zn 0.344 0.416 0.417

Zn 0.076 0.661 0.417

Zn 0.748 0.746 0.333

Zn 0.259 0.002 0.333

Zn 0.003 0.257 0.333

Zn 0.930 0.588 0.250

Zn 0.662 0.075 0.250

Zn 0.417 0.343 0.250

Zn 0.742 0.749 0.167

Zn 0.256 0.993 0.167

Zn 0.011 0.263 0.167

Zn 0.662 0.074 0.083

Zn 0.930 0.588 0.083

Zn 0.417 0.343 0.083

O 0.257 0.256 1.000
O 0.749 0.002 1.000
O 0.003 0.748 1.000
O 0.589 0.660 0.917
O 0.345 0.930 0.917
O 0.075 0.416 0.917
O 0.257 0.256 0.833
O 0.749 0.002 0.833
O 0.003 0.747 0.833
O 0.661 0.587 0.750
O 0.417 0.074 0.750
O 0.931 0.344 0.750
O 0.257 0.256 0.666
O 0.749 0.002 0.666
O 0.003 0.747 0.666
O 0.589 0.660 0.583
O 0.345 0.929 0.583
O 0.076 0.416 0.583
O 0.750 0.009 0.500
O 0.263 0.254 0.500
O 0.996 0.742 0.500
O 0.589 0.660 0.417
O 0.345 0.929 0.417
O 0.076 0.416 0.417
O 0.257 0.256 0.333
O 0.003 0.748 0.333
O 0.749 0.002 0.333
O 0.662 0.587 0.250
O 0.930 0.343 0.250
O 0.417 0.074 0.250
O 0.743 0.995 0.167
O 0.010 0.749 0.167
O 0.256 0.262 0.167
O 0.930 0.343 0.083
O 0.417 0.074 0.083
O 0.662 0.587 0.083

Str 51 (LIO)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.50 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max}: 0.33 nm

V_{pore} : 15 %

D_{pore} : 3

cell parameters

7.857 7.857 10.050 90.00 90.00 120.01

fractional coordinates

Zn 0.080 0.411 0.833

Zn 0.336 0.921 0.833

Zn 0.590 0.666 0.833

Zn 0.921 0.593 0.667

Zn 0.677 0.080 0.667

Zn 0.408 0.324 0.667

Zn 0.597 0.674 0.500
Zn 0.327 0.919 0.500
Zn 0.082 0.404 0.500
Zn 0.677 0.080 0.334
Zn 0.408 0.324 0.334
Zn 0.921 0.593 0.334
Zn 0.590 0.666 0.167
Zn 0.336 0.921 0.167
Zn 0.080 0.411 0.167
Zn 0.994 0.740 0.000
Zn 0.750 0.007 0.000
Zn 0.262 0.251 0.000
O 0.081 0.666 0.834
O 0.590 0.920 0.833
O 0.335 0.411 0.833
O 0.922 0.325 0.666
O 0.677 0.593 0.666
O 0.408 0.080 0.666
O 0.596 0.919 0.500
O 0.082 0.673 0.500
O 0.328 0.405 0.500
O 0.677 0.593 0.334
O 0.408 0.080 0.334
O 0.922 0.325 0.334
O 0.335 0.411 0.167
O 0.590 0.920 0.167
O 0.081 0.666 0.167
O 0.994 0.252 0.000
O 0.264 0.008 0.000
O 0.749 0.738 0.000

Str 52 (LOS)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.49 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max}: 0.34 nm

V_{pore} : 15 %

D_{pore} : 3

cell parameters

7.887 7.887 6.670 90.00 90.00 120.00

fractional coordinates

Zn 0.587 0.935 0.750

Zn 0.344 0.424 0.750

Zn 0.076 0.667 0.750

Zn 0.748 0.755 0.500

Zn 0.256 0.009 0.500

Zn 0.002 0.263 0.500

Zn 0.928 0.594 0.250

Zn 0.660 0.083 0.250

Zn 0.417 0.350 0.250

Zn 0.748 0.755 0.000

Zn 0.256 0.009 0.000

Zn 0.002 0.263 0.000

O 0.587 0.667 0.750
O 0.344 0.936 0.750
O 0.075 0.424 0.750
O 0.748 0.009 0.500
O 0.256 0.263 0.500
O 0.002 0.755 0.500
O 0.929 0.351 0.250
O 0.660 0.594 0.250
O 0.417 0.082 0.250
O 0.748 0.009 0.000
O 0.256 0.263 0.000
O 0.002 0.755 0.000

Str 53 (SOD)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.53 eV

E_{rel} : 0.14 eV/ZnO

Pore_{max} : 0.35 nm

V_{pore} : 15 %

D_{pore} : 3

cell parameters

5.663 5.663 5.663 90.00 90.00 90.00

fractional coordinates

Zn 0.000 0.500 0.750

Zn 0.750 0.000 0.500

Zn 0.250 0.000 0.500

Zn 0.000 0.500 0.250

Zn 0.500 0.750 0.000

Zn 0.500 0.250 0.000

O 0.500 0.000 0.750

O 0.000 0.750 0.500

O 0.000 0.250 0.500

O 0.500 0.000 0.250

O 0.750 0.500 0.000

O 0.250 0.500 0.000

Str 54 (AET)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.45 eV

E_{rel} : 0.23 eV/ZnO

Pore_{max} : 0.41 nm

V_{pore} : 17 %

D_{pore} : 1

cell parameters

21.516 9.431 5.296 90.00 90.00 90.00

fractional coordinates

Zn 0.500 0.352 0.583

Zn 0.000 0.852 0.583

Zn 0.819 0.399 0.563

Zn 0.681 0.899 0.563

Zn 0.319 0.899 0.563

Zn 0.181 0.399 0.563

Zn 0.921 0.111 0.563

Zn 0.579 0.611 0.563

Zn 0.421 0.611 0.563
Zn 0.079 0.111 0.563
Zn 0.846 0.790 0.560
Zn 0.654 0.290 0.560
Zn 0.346 0.290 0.560
Zn 0.154 0.790 0.560
Zn 0.772 0.099 0.554
Zn 0.728 0.599 0.554
Zn 0.272 0.599 0.554
Zn 0.228 0.099 0.554
Zn 0.500 0.648 0.083
Zn 0.000 0.148 0.083
Zn 0.819 0.601 0.063
Zn 0.681 0.101 0.063
Zn 0.319 0.101 0.063
Zn 0.181 0.601 0.063
Zn 0.921 0.889 0.063
Zn 0.579 0.389 0.063
Zn 0.421 0.389 0.063
Zn 0.079 0.889 0.063
Zn 0.846 0.210 0.060
Zn 0.654 0.710 0.060
Zn 0.346 0.710 0.060
Zn 0.154 0.210 0.060
Zn 0.772 0.901 0.054
Zn 0.728 0.401 0.054
Zn 0.272 0.401 0.054
Zn 0.228 0.901 0.054
O 0.920 0.102 0.940
O 0.580 0.602 0.940
O 0.420 0.602 0.940
O 0.080 0.102 0.940
O 0.845 0.790 0.939
O 0.655 0.290 0.939
O 0.345 0.290 0.939
O 0.155 0.790 0.939
O 0.822 0.401 0.939
O 0.678 0.901 0.939
O 0.322 0.901 0.939
O 0.178 0.401 0.939
O 0.500 0.320 0.937
O 0.000 0.820 0.937
O 0.772 0.103 0.931
O 0.728 0.603 0.931
O 0.272 0.603 0.931
O 0.228 0.103 0.931
O 0.920 0.898 0.440
O 0.580 0.398 0.440
O 0.420 0.398 0.440
O 0.080 0.898 0.440
O 0.845 0.210 0.439
O 0.655 0.710 0.439

O 0.345 0.710 0.439
O 0.155 0.210 0.439
O 0.822 0.599 0.439
O 0.678 0.099 0.439
O 0.322 0.099 0.439
O 0.178 0.599 0.439
O 0.500 0.680 0.437
O 0.000 0.180 0.437
O 0.772 0.897 0.431
O 0.728 0.397 0.431
O 0.272 0.397 0.431
O 0.228 0.897 0.431

Str 55 (ATT)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.65 eV

E_{rel} : 0.29 eV/ZnO

Pore_{max} : 0.28 nm

V_{pore} : 17 %

D_{pore} : 2

cell parameters

6.223 10.376 5.707 90.00 90.00 90.00

fractional coordinates

Zn 0.926 0.750 0.858

Zn 0.574 0.250 0.858

Zn 0.910 0.401 0.641

Zn 0.910 0.099 0.641

Zn 0.590 0.901 0.641

Zn 0.590 0.599 0.641

Zn 0.410 0.401 0.359

Zn 0.410 0.099 0.359

Zn 0.090 0.901 0.359

Zn 0.090 0.599 0.359

Zn 0.426 0.750 0.142

Zn 0.074 0.250 0.142

O 0.920 0.250 0.851

O 0.580 0.750 0.851

O 0.923 0.904 0.653

O 0.923 0.596 0.653

O 0.577 0.404 0.653

O 0.577 0.096 0.653

O 0.423 0.904 0.347

O 0.423 0.596 0.347

O 0.077 0.404 0.347

O 0.077 0.096 0.347

O 0.420 0.250 0.149

O 0.080 0.750 0.149

Str 56 (ACO)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.99 eV

E_{rel} : 0.23 eV/ZnO

Pore_{max} : 0.23 nm

V_{pore} : 17 %

D_{pore}: 3
cell parameters
6.278 6.278 6.278 90.00 90.00 90.00

fractional coordinates

Zn 0.835 0.165 0.835

Zn 0.165 0.835 0.835

Zn 0.665 0.665 0.665

Zn 0.335 0.335 0.665

Zn 0.665 0.335 0.335

Zn 0.335 0.665 0.335

Zn 0.835 0.835 0.165

Zn 0.165 0.165 0.165

O 0.838 0.838 0.838

O 0.162 0.162 0.838

O 0.662 0.338 0.662

O 0.338 0.662 0.662

O 0.662 0.662 0.338

O 0.338 0.338 0.338

O 0.838 0.162 0.162

O 0.162 0.838 0.162

Str 57 (PON)¹⁷

ΔE_{gap} (PBE_{GW-fit}): 0.33 eV

E_{rel}: 0.31 eV/ZnO

Pore_{max}: 0.30 nm

V_{pore}: 17 %

D_{pore}: 2

cell parameters

5.881 5.945 10.455 90.00 90.00 90.00

fractional coordinates

Zn 0.838 0.142 0.894

Zn 0.338 0.858 0.894

Zn 0.812 0.605 0.836

Zn 0.312 0.395 0.836

Zn 0.971 0.358 0.578

Zn 0.471 0.642 0.578

Zn 0.662 0.142 0.394

Zn 0.162 0.858 0.394

Zn 0.688 0.605 0.336

Zn 0.188 0.395 0.336

Zn 0.529 0.358 0.078

Zn 0.029 0.642 0.078

O 0.990 0.858 0.910

O 0.490 0.142 0.910

O 0.507 0.654 0.761

O 0.007 0.346 0.761

O 0.675 0.417 0.503

O 0.175 0.583 0.503

O 0.510 0.858 0.410

O 0.010 0.142 0.410

O 0.993 0.654 0.261

O 0.493 0.346 0.261

O 0.825 0.417 0.003
O 0.325 0.583 0.003

Str 58 (ZON)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.59 eV

E_{rel} : 0.31 eV/ZnO

Pore_{max}: 0.32 nm

V_{pore} : 18 %

D_{pore} : 2

cell parameters

9.108 9.988 10.863 90.00 90.00 90.00

fractional coordinates

Zn 0.769 0.341 0.965

Zn 0.731 0.841 0.965

Zn 0.927 0.098 0.929

Zn 0.573 0.598 0.929

Zn 0.425 0.901 0.924

Zn 0.075 0.401 0.924

Zn 0.433 0.273 0.834

Zn 0.067 0.773 0.834

Zn 0.933 0.273 0.666

Zn 0.567 0.773 0.666

Zn 0.925 0.901 0.576

Zn 0.575 0.401 0.576

Zn 0.427 0.098 0.571

Zn 0.073 0.598 0.571

Zn 0.270 0.341 0.535

Zn 0.231 0.841 0.535

Zn 0.769 0.159 0.465

Zn 0.731 0.659 0.465

Zn 0.927 0.402 0.429

Zn 0.573 0.902 0.429

Zn 0.425 0.599 0.424

Zn 0.075 0.099 0.424

Zn 0.433 0.227 0.334

Zn 0.067 0.727 0.334

Zn 0.933 0.227 0.166

Zn 0.567 0.727 0.166

Zn 0.925 0.599 0.076

Zn 0.575 0.099 0.076

Zn 0.427 0.402 0.071

Zn 0.073 0.902 0.071

Zn 0.270 0.159 0.035

Zn 0.231 0.659 0.035

O 0.272 0.339 0.949

O 0.228 0.839 0.949

O 0.434 0.098 0.924

O 0.066 0.598 0.924

O 0.921 0.904 0.918

O 0.579 0.404 0.918

O 0.935 0.271 0.842

O 0.565 0.771 0.842

O 0.435 0.271 0.658
O 0.065 0.771 0.658
O 0.421 0.904 0.582
O 0.079 0.404 0.582
O 0.934 0.098 0.576
O 0.566 0.598 0.576
O 0.772 0.339 0.551
O 0.728 0.839 0.551
O 0.272 0.161 0.449
O 0.228 0.661 0.449
O 0.434 0.402 0.424
O 0.066 0.902 0.424
O 0.921 0.596 0.418
O 0.579 0.096 0.418
O 0.935 0.229 0.342
O 0.565 0.729 0.342
O 0.435 0.229 0.158
O 0.065 0.729 0.158
O 0.421 0.596 0.082
O 0.079 0.096 0.082
O 0.934 0.402 0.076
O 0.566 0.902 0.076
O 0.772 0.161 0.051
O 0.728 0.661 0.051

Str 59 (OWE)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.68 eV

E_{rel} : 0.36 eV/ZnO

Pore_{max}: 0.30 nm

V_{pore} : 18 %

D_{pore} : 2

cell parameters

9.477 9.404 5.534 90.00 90.00 90.00

fractional coordinates

Zn 0.981 0.250 0.833

Zn 0.519 0.750 0.833

Zn 0.861 0.899 0.645

Zn 0.861 0.601 0.645

Zn 0.639 0.399 0.645

Zn 0.639 0.101 0.645

Zn 0.355 0.250 0.620

Zn 0.145 0.750 0.620

Zn 0.855 0.250 0.380

Zn 0.645 0.750 0.380

Zn 0.361 0.899 0.355

Zn 0.361 0.601 0.355

Zn 0.139 0.399 0.355

Zn 0.139 0.101 0.355

Zn 0.481 0.250 0.167

Zn 0.019 0.750 0.167

O 0.979 0.750 0.824

O 0.521 0.250 0.824

O 0.863 0.398 0.661
O 0.863 0.102 0.661
O 0.637 0.898 0.661
O 0.637 0.602 0.661
O 0.349 0.750 0.625
O 0.151 0.250 0.625
O 0.849 0.750 0.375
O 0.651 0.250 0.375
O 0.363 0.398 0.339
O 0.363 0.102 0.339
O 0.137 0.898 0.339
O 0.137 0.602 0.339
O 0.479 0.750 0.176
O 0.021 0.250 0.176

Str 60 (AFI)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.48 eV

E_{rel} : 0.19 eV/ZnO

Pore_{max}: 0.48 nm

V_{pore} : 18 %

D_{pore} : 1

cell parameters

8.925 8.925 5.298 90.00 90.00 120.00

fractional coordinates

Zn 0.877 0.326 0.688

Zn 0.674 0.551 0.688

Zn 0.551 0.877 0.688

Zn 0.449 0.123 0.688

Zn 0.326 0.449 0.688

Zn 0.123 0.674 0.688

Zn 0.877 0.551 0.188

Zn 0.674 0.123 0.188

Zn 0.551 0.674 0.188

Zn 0.449 0.326 0.188

Zn 0.326 0.877 0.188

Zn 0.123 0.449 0.188

O 0.878 0.552 0.812

O 0.674 0.122 0.812

O 0.552 0.674 0.812

O 0.448 0.326 0.812

O 0.326 0.878 0.812

O 0.122 0.448 0.812

O 0.878 0.326 0.312

O 0.674 0.552 0.312

O 0.552 0.878 0.312

O 0.448 0.122 0.312

O 0.326 0.448 0.312

O 0.122 0.674 0.312

Str 61 (LAU)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.29 eV

E_{rel} : 0.32 eV/ZnO

Pore_{max}: 0.33 nm

V_{pore}: 19 %

D_{pore}: 2

cell parameters

9.018 8.426 10.503 90.00 112.56 90.00

fractional coordinates

Zn 0.614 0.377 0.944

Zn 0.114 0.877 0.944

Zn 0.881 0.185 0.869

Zn 0.381 0.685 0.869

Zn 0.742 0.618 0.826

Zn 0.242 0.118 0.826

Zn 0.758 0.882 0.674

Zn 0.258 0.382 0.674

Zn 0.619 0.315 0.631

Zn 0.119 0.815 0.631

Zn 0.886 0.123 0.556

Zn 0.386 0.623 0.556

Zn 0.614 0.623 0.444

Zn 0.114 0.123 0.444

Zn 0.881 0.815 0.369

Zn 0.381 0.315 0.369

Zn 0.742 0.382 0.326

Zn 0.242 0.882 0.326

Zn 0.758 0.118 0.174

Zn 0.258 0.618 0.174

Zn 0.619 0.685 0.131

Zn 0.119 0.185 0.131

Zn 0.886 0.877 0.056

Zn 0.386 0.377 0.056

O 0.612 0.622 0.943

O 0.112 0.122 0.943

O 0.879 0.809 0.870

O 0.379 0.309 0.870

O 0.742 0.381 0.828

O 0.242 0.881 0.828

O 0.758 0.119 0.672

O 0.258 0.619 0.672

O 0.621 0.691 0.630

O 0.121 0.191 0.630

O 0.888 0.878 0.557

O 0.388 0.378 0.557

O 0.612 0.378 0.443

O 0.112 0.878 0.443

O 0.879 0.191 0.370

O 0.379 0.691 0.370

O 0.742 0.619 0.328

O 0.242 0.119 0.328

O 0.758 0.881 0.172

O 0.258 0.381 0.172

O 0.621 0.309 0.130

O 0.121 0.809 0.130

O 0.888 0.122 0.057
O 0.388 0.622 0.057

Str 62 (GIS)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.52 eV

E_{rel} : 0.29 eV/ZnO

Pore_{max}: 0.29 nm

V_{pore} : 21 %

D_{pore} : 3

cell parameters

6.409 6.409 6.327 90.00 90.00 88.87

fractional coordinates

Zn 0.837 0.413 0.875

Zn 0.163 0.087 0.875

Zn 0.663 0.087 0.625

Zn 0.337 0.413 0.625

Zn 0.663 0.587 0.375

Zn 0.337 0.913 0.375

Zn 0.837 0.913 0.125

Zn 0.163 0.587 0.125

O 0.838 0.088 0.875

O 0.162 0.412 0.875

O 0.662 0.412 0.625

O 0.338 0.088 0.625

O 0.662 0.912 0.375

O 0.338 0.588 0.375

O 0.838 0.588 0.125

O 0.162 0.912 0.125

Str 63 (SIV)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.65 eV

E_{rel} : 0.29 eV/ZnO

Pore_{max}: 0.32 nm

V_{pore} : 21 %

D_{pore} : 3

cell parameters

6.403 9.010 18.048 90.00 90.65 90.00

fractional coordinates

Zn 0.663 0.520 0.947

Zn 0.163 0.020 0.947

Zn 0.664 0.144 0.884

Zn 0.164 0.644 0.884

Zn 0.838 0.856 0.866

Zn 0.338 0.356 0.866

Zn 0.840 0.478 0.804

Zn 0.340 0.978 0.804

Zn 0.660 0.978 0.696

Zn 0.160 0.478 0.696

Zn 0.662 0.356 0.634

Zn 0.162 0.856 0.634

Zn 0.836 0.644 0.616

Zn 0.336 0.144 0.616

Zn 0.837 0.020 0.553
Zn 0.337 0.520 0.553
Zn 0.663 0.480 0.447
Zn 0.163 0.980 0.447
Zn 0.664 0.856 0.384
Zn 0.164 0.356 0.384
Zn 0.838 0.144 0.366
Zn 0.338 0.644 0.366
Zn 0.840 0.522 0.304
Zn 0.340 0.022 0.304
Zn 0.660 0.022 0.196
Zn 0.160 0.522 0.196
Zn 0.662 0.644 0.134
Zn 0.162 0.144 0.134
Zn 0.836 0.356 0.116
Zn 0.336 0.856 0.116
Zn 0.837 0.980 0.053
Zn 0.337 0.480 0.053
O 0.837 0.019 0.947
O 0.337 0.519 0.947
O 0.837 0.643 0.884
O 0.337 0.143 0.884
O 0.662 0.356 0.867
O 0.162 0.856 0.867
O 0.664 0.981 0.803
O 0.164 0.481 0.803
O 0.836 0.481 0.697
O 0.336 0.981 0.697
O 0.838 0.856 0.633
O 0.338 0.356 0.633
O 0.663 0.143 0.616
O 0.163 0.643 0.616
O 0.663 0.519 0.553
O 0.163 0.019 0.553
O 0.837 0.981 0.447
O 0.337 0.481 0.447
O 0.837 0.357 0.384
O 0.337 0.857 0.384
O 0.662 0.644 0.367
O 0.162 0.144 0.367
O 0.664 0.019 0.303
O 0.164 0.519 0.303
O 0.836 0.519 0.197
O 0.336 0.019 0.197
O 0.838 0.144 0.133
O 0.338 0.644 0.133
O 0.663 0.857 0.116
O 0.163 0.357 0.116
O 0.663 0.481 0.053
O 0.163 0.981 0.053

Str 64 (OFF)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.88 eV
 E_{rel} : 0.29 eV/ZnO
Pore_{max}: 0.37 nm
 V_{pore} : 21 %
 D_{pore} : 3
cell parameters
8.036 8.036 10.395 90.00 90.00 120.00
fractional coordinates
Zn 0.998 0.249 0.902
Zn 0.751 0.749 0.902
Zn 0.251 0.002 0.902
Zn 0.582 0.931 0.750
Zn 0.348 0.418 0.750
Zn 0.069 0.652 0.750
Zn 0.998 0.249 0.598
Zn 0.751 0.749 0.598
Zn 0.251 0.002 0.598
Zn 0.998 0.749 0.402
Zn 0.751 0.002 0.402
Zn 0.251 0.249 0.402
Zn 0.582 0.652 0.250
Zn 0.348 0.931 0.250
Zn 0.069 0.418 0.250
Zn 0.998 0.749 0.098
Zn 0.751 0.002 0.098
Zn 0.251 0.249 0.098
O 0.993 0.741 0.904
O 0.748 0.007 0.904
O 0.259 0.252 0.904
O 0.582 0.660 0.750
O 0.340 0.922 0.750
O 0.078 0.418 0.750
O 0.993 0.741 0.596
O 0.748 0.007 0.596
O 0.259 0.252 0.596
O 0.993 0.252 0.404
O 0.748 0.741 0.404
O 0.259 0.007 0.404
O 0.582 0.922 0.250
O 0.340 0.418 0.250
O 0.078 0.660 0.250
O 0.993 0.252 0.096
O 0.748 0.741 0.096
O 0.259 0.007 0.096

Str 65 (MOZ)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.72 eV
 E_{rel} : 0.32 eV/ZnO
Pore_{max}: 0.65 nm
 V_{pore} : 21 %
 D_{pore} : 3
cell parameters

19.478 19.478 10.531 90.00 90.00 120.00
fractional coordinates
Zn 0.908 0.711 0.903
Zn 0.803 0.092 0.903
Zn 0.711 0.803 0.903
Zn 0.289 0.197 0.903
Zn 0.197 0.908 0.903
Zn 0.092 0.289 0.903
Zn 0.802 0.503 0.903
Zn 0.701 0.198 0.903
Zn 0.503 0.701 0.903
Zn 0.497 0.299 0.903
Zn 0.299 0.802 0.903
Zn 0.198 0.497 0.903
Zn 0.906 0.298 0.902
Zn 0.702 0.608 0.902
Zn 0.608 0.906 0.902
Zn 0.392 0.094 0.902
Zn 0.298 0.392 0.902
Zn 0.094 0.702 0.902
Zn 0.945 0.165 0.750
Zn 0.944 0.579 0.750
Zn 0.835 0.779 0.750
Zn 0.834 0.369 0.750
Zn 0.779 0.945 0.750
Zn 0.635 0.056 0.750
Zn 0.631 0.465 0.750
Zn 0.579 0.635 0.750
Zn 0.535 0.166 0.750
Zn 0.465 0.834 0.750
Zn 0.421 0.365 0.750
Zn 0.369 0.535 0.750
Zn 0.365 0.944 0.750
Zn 0.221 0.055 0.750
Zn 0.166 0.631 0.750
Zn 0.165 0.221 0.750
Zn 0.056 0.421 0.750
Zn 0.055 0.835 0.750
Zn 0.906 0.298 0.598
Zn 0.702 0.608 0.598
Zn 0.608 0.906 0.598
Zn 0.392 0.094 0.598
Zn 0.298 0.392 0.598
Zn 0.094 0.702 0.598
Zn 0.802 0.503 0.597
Zn 0.701 0.198 0.597
Zn 0.503 0.701 0.597
Zn 0.497 0.299 0.597
Zn 0.299 0.802 0.597
Zn 0.198 0.497 0.597
Zn 0.908 0.711 0.597
Zn 0.803 0.092 0.597

Zn 0.711 0.803 0.597
Zn 0.289 0.197 0.597
Zn 0.197 0.908 0.597
Zn 0.092 0.289 0.597
Zn 0.908 0.197 0.403
Zn 0.803 0.711 0.403
Zn 0.711 0.908 0.403
Zn 0.289 0.092 0.403
Zn 0.197 0.289 0.403
Zn 0.092 0.803 0.403
Zn 0.802 0.299 0.403
Zn 0.701 0.503 0.403
Zn 0.503 0.802 0.403
Zn 0.497 0.198 0.403
Zn 0.299 0.497 0.403
Zn 0.198 0.701 0.403
Zn 0.906 0.608 0.402
Zn 0.702 0.094 0.402
Zn 0.608 0.702 0.402
Zn 0.392 0.298 0.402
Zn 0.298 0.906 0.402
Zn 0.094 0.392 0.402
Zn 0.945 0.779 0.250
Zn 0.944 0.365 0.250
Zn 0.835 0.055 0.250
Zn 0.834 0.465 0.250
Zn 0.779 0.835 0.250
Zn 0.635 0.579 0.250
Zn 0.631 0.166 0.250
Zn 0.579 0.944 0.250
Zn 0.535 0.369 0.250
Zn 0.465 0.631 0.250
Zn 0.421 0.056 0.250
Zn 0.369 0.834 0.250
Zn 0.365 0.421 0.250
Zn 0.221 0.165 0.250
Zn 0.166 0.535 0.250
Zn 0.165 0.945 0.250
Zn 0.056 0.635 0.250
Zn 0.055 0.221 0.250
Zn 0.906 0.608 0.098
Zn 0.702 0.094 0.098
Zn 0.608 0.702 0.098
Zn 0.392 0.298 0.098
Zn 0.298 0.906 0.098
Zn 0.094 0.392 0.098
Zn 0.802 0.299 0.097
Zn 0.701 0.503 0.097
Zn 0.503 0.802 0.097
Zn 0.497 0.198 0.097
Zn 0.299 0.497 0.097
Zn 0.198 0.701 0.097

Zn 0.908 0.197 0.097
Zn 0.803 0.711 0.097
Zn 0.711 0.908 0.097
Zn 0.289 0.092 0.097
Zn 0.197 0.289 0.097
Zn 0.092 0.803 0.097
O 0.908 0.610 0.906
O 0.702 0.092 0.906
O 0.610 0.702 0.906
O 0.390 0.298 0.906
O 0.298 0.908 0.906
O 0.092 0.390 0.906
O 0.911 0.199 0.905
O 0.801 0.712 0.905
O 0.712 0.911 0.905
O 0.288 0.089 0.905
O 0.199 0.288 0.905
O 0.089 0.801 0.905
O 0.800 0.302 0.904
O 0.698 0.499 0.904
O 0.501 0.200 0.904
O 0.499 0.800 0.904
O 0.302 0.501 0.904
O 0.200 0.698 0.904
O 0.942 0.367 0.750
O 0.941 0.781 0.750
O 0.841 0.059 0.750
O 0.838 0.470 0.750
O 0.781 0.841 0.750
O 0.633 0.574 0.750
O 0.632 0.162 0.750
O 0.574 0.942 0.750
O 0.530 0.368 0.750
O 0.470 0.632 0.750
O 0.426 0.058 0.750
O 0.368 0.838 0.750
O 0.367 0.426 0.750
O 0.219 0.159 0.750
O 0.162 0.530 0.750
O 0.159 0.941 0.750
O 0.059 0.219 0.750
O 0.058 0.633 0.750
O 0.800 0.302 0.596
O 0.698 0.499 0.596
O 0.501 0.200 0.596
O 0.499 0.800 0.596
O 0.302 0.501 0.596
O 0.200 0.698 0.596
O 0.911 0.199 0.595
O 0.801 0.712 0.595
O 0.712 0.911 0.595
O 0.288 0.089 0.595

O 0.199 0.288 0.595
O 0.089 0.801 0.595
O 0.908 0.610 0.594
O 0.702 0.092 0.594
O 0.610 0.702 0.594
O 0.390 0.298 0.594
O 0.298 0.908 0.594
O 0.092 0.390 0.594
O 0.908 0.298 0.406
O 0.702 0.610 0.406
O 0.610 0.908 0.406
O 0.390 0.092 0.406
O 0.298 0.390 0.406
O 0.092 0.702 0.406
O 0.911 0.712 0.405
O 0.801 0.089 0.405
O 0.712 0.801 0.405
O 0.288 0.199 0.405
O 0.199 0.911 0.405
O 0.089 0.288 0.405
O 0.800 0.499 0.404
O 0.698 0.200 0.404
O 0.501 0.302 0.404
O 0.499 0.698 0.404
O 0.302 0.800 0.404
O 0.200 0.501 0.404
O 0.942 0.574 0.250
O 0.941 0.159 0.250
O 0.841 0.781 0.250
O 0.838 0.368 0.250
O 0.781 0.941 0.250
O 0.633 0.058 0.250
O 0.632 0.470 0.250
O 0.574 0.633 0.250
O 0.530 0.162 0.250
O 0.470 0.838 0.250
O 0.426 0.367 0.250
O 0.368 0.530 0.250
O 0.367 0.942 0.250
O 0.219 0.059 0.250
O 0.162 0.632 0.250
O 0.159 0.219 0.250
O 0.059 0.841 0.250
O 0.058 0.426 0.250
O 0.800 0.499 0.096
O 0.698 0.200 0.096
O 0.501 0.302 0.096
O 0.499 0.698 0.096
O 0.302 0.800 0.096
O 0.200 0.501 0.096
O 0.911 0.712 0.095
O 0.801 0.089 0.095

O 0.712 0.801 0.095
O 0.288 0.199 0.095
O 0.199 0.911 0.095
O 0.089 0.288 0.095
O 0.908 0.298 0.094
O 0.702 0.610 0.094
O 0.610 0.908 0.094
O 0.390 0.092 0.094
O 0.298 0.390 0.094
O 0.092 0.702 0.094

Str 66 (PHI)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.81 eV

E_{rel} : 0.29 eV/ZnO

Pore_{max}: 0.32 nm

V_{pore} : 21 %

D_{pore} : 3

cell parameters

6.418 9.026 9.030 90.00 90.59 90.00

fractional coordinates

Zn 0.837 0.106 0.983

Zn 0.337 0.606 0.983

Zn 0.340 0.227 0.858

Zn 0.840 0.727 0.858

Zn 0.660 0.227 0.642

Zn 0.160 0.727 0.642

Zn 0.663 0.606 0.517

Zn 0.163 0.106 0.517

Zn 0.837 0.894 0.483

Zn 0.337 0.394 0.483

Zn 0.840 0.273 0.358

Zn 0.340 0.773 0.358

Zn 0.660 0.773 0.142

Zn 0.160 0.273 0.142

Zn 0.663 0.394 0.017

Zn 0.163 0.894 0.017

O 0.663 0.607 0.986

O 0.163 0.107 0.986

O 0.664 0.230 0.857

O 0.165 0.730 0.857

O 0.835 0.730 0.643

O 0.336 0.230 0.643

O 0.837 0.107 0.514

O 0.337 0.607 0.514

O 0.663 0.393 0.486

O 0.163 0.893 0.486

O 0.664 0.770 0.357

O 0.165 0.270 0.357

O 0.835 0.270 0.143

O 0.336 0.770 0.143

O 0.837 0.893 0.014

O 0.337 0.393 0.014

Str 67 (MER)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.86 eV

E_{rel} : 0.30 eV/ZnO

Pore_{max}: 0.39 nm

V_{pore}: 21 %

D_{pore}: 3

cell parameters

9.046 9.046 6.425 90.00 90.00 90.00

fractional coordinates

Zn 0.893 0.731 0.839

Zn 0.731 0.107 0.839

Zn 0.269 0.893 0.839

Zn 0.107 0.269 0.839

Zn 0.769 0.393 0.661

Zn 0.607 0.769 0.661

Zn 0.393 0.231 0.661

Zn 0.231 0.607 0.661

Zn 0.769 0.607 0.339

Zn 0.607 0.231 0.339

Zn 0.393 0.769 0.339

Zn 0.231 0.393 0.339

Zn 0.893 0.269 0.161

Zn 0.731 0.893 0.161

Zn 0.269 0.107 0.161

Zn 0.107 0.731 0.161

O 0.893 0.266 0.836

O 0.734 0.893 0.836

O 0.266 0.107 0.836

O 0.107 0.734 0.836

O 0.766 0.607 0.664

O 0.607 0.234 0.664

O 0.393 0.766 0.664

O 0.234 0.393 0.664

O 0.766 0.393 0.336

O 0.607 0.766 0.336

O 0.393 0.234 0.336

O 0.234 0.607 0.336

O 0.893 0.734 0.164

O 0.734 0.107 0.164

O 0.266 0.893 0.164

O 0.107 0.266 0.164

Str 68 (UMK)¹⁹

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.85 eV

E_{rel} : 0.24 eV/ZnO

Pore_{max}: 0.48 nm

V_{pore}: 22 %

D_{pore}: 1

cell parameters

8.947 8.948 5.559 90.00 90.00 120.00

fractional coordinates

Zn 0.321 0.451 0.934
Zn 0.127 0.668 0.934
Zn 0.538 0.862 0.934
Zn 0.864 0.536 0.570
Zn 0.669 0.125 0.570
Zn 0.453 0.320 0.570
Zn 0.127 0.451 0.434
Zn 0.538 0.668 0.434
Zn 0.321 0.862 0.434
Zn 0.864 0.320 0.070
Zn 0.669 0.536 0.070
Zn 0.453 0.125 0.070
O 0.867 0.538 0.936
O 0.667 0.122 0.935
O 0.451 0.322 0.935
O 0.323 0.450 0.569
O 0.123 0.666 0.569
O 0.539 0.866 0.569
O 0.867 0.322 0.436
O 0.667 0.538 0.436
O 0.451 0.122 0.435
O 0.123 0.450 0.069
O 0.323 0.866 0.069
O 0.539 0.666 0.069

Str 69 (LEV)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.84 eV

E_{rel} : 0.28 eV/ZnO

Pore_{max}: 0.37 nm

V_{pore} : 22 %

D_{pore} : 3

cell parameters

8.203 8.203 30.509 90.00 90.00 120.00

fractional coordinates

Zn 0.755 0.758 0.966
Zn 0.242 0.997 0.966
Zn 0.003 0.245 0.966
Zn 0.915 0.582 0.917
Zn 0.667 0.085 0.917
Zn 0.418 0.333 0.917
Zn 0.578 0.669 0.867
Zn 0.331 0.909 0.867
Zn 0.091 0.422 0.867
Zn 0.575 0.912 0.800
Zn 0.336 0.425 0.800
Zn 0.088 0.664 0.800
Zn 0.752 0.752 0.750
Zn 0.248 0.000 0.750
Zn 0.000 0.248 0.750
Zn 0.912 0.575 0.700
Zn 0.664 0.088 0.700
Zn 0.425 0.336 0.700

Zn 0.909 0.331 0.633
Zn 0.669 0.578 0.633
Zn 0.422 0.091 0.633
Zn 0.582 0.915 0.583
Zn 0.333 0.418 0.583
Zn 0.085 0.667 0.583
Zn 0.997 0.242 0.534
Zn 0.758 0.755 0.534
Zn 0.245 0.003 0.534
Zn 0.755 0.997 0.466
Zn 0.242 0.245 0.466
Zn 0.003 0.758 0.466
Zn 0.915 0.333 0.417
Zn 0.667 0.582 0.417
Zn 0.418 0.085 0.417
Zn 0.578 0.909 0.367
Zn 0.331 0.422 0.367
Zn 0.091 0.669 0.367
Zn 0.575 0.664 0.300
Zn 0.336 0.912 0.300
Zn 0.088 0.425 0.300
Zn 0.752 0.000 0.250
Zn 0.248 0.248 0.250
Zn 0.000 0.752 0.250
Zn 0.912 0.336 0.200
Zn 0.664 0.575 0.200
Zn 0.425 0.088 0.200
Zn 0.909 0.578 0.133
Zn 0.669 0.091 0.133
Zn 0.422 0.331 0.133
Zn 0.582 0.667 0.083
Zn 0.333 0.915 0.083
Zn 0.085 0.418 0.083
Zn 0.997 0.755 0.034
Zn 0.758 0.003 0.034
Zn 0.245 0.242 0.034
O 0.747 0.992 0.967
O 0.246 0.253 0.967
O 0.008 0.754 0.967
O 0.912 0.333 0.917
O 0.667 0.578 0.917
O 0.422 0.088 0.917
O 0.587 0.912 0.866
O 0.326 0.413 0.866
O 0.088 0.674 0.866
O 0.579 0.659 0.800
O 0.341 0.920 0.800
O 0.080 0.421 0.800
O 0.755 0.000 0.750
O 0.245 0.245 0.750
O 0.000 0.755 0.750
O 0.920 0.341 0.700

O 0.659 0.579 0.700
O 0.421 0.080 0.700
O 0.912 0.587 0.634
O 0.674 0.088 0.634
O 0.413 0.326 0.634
O 0.578 0.667 0.583
O 0.333 0.912 0.583
O 0.088 0.422 0.583
O 0.992 0.747 0.533
O 0.754 0.008 0.533
O 0.253 0.246 0.533
O 0.747 0.754 0.467
O 0.246 0.992 0.467
O 0.008 0.253 0.467
O 0.912 0.578 0.417
O 0.667 0.088 0.417
O 0.422 0.333 0.417
O 0.587 0.674 0.366
O 0.326 0.912 0.366
O 0.088 0.413 0.366
O 0.579 0.920 0.300
O 0.341 0.421 0.300
O 0.080 0.659 0.300
O 0.755 0.755 0.250
O 0.245 0.000 0.250
O 0.000 0.245 0.250
O 0.920 0.579 0.200
O 0.659 0.080 0.200
O 0.421 0.341 0.200
O 0.912 0.326 0.134
O 0.674 0.587 0.134
O 0.413 0.088 0.134
O 0.578 0.912 0.083
O 0.333 0.422 0.083
O 0.088 0.667 0.083
O 0.992 0.246 0.033
O 0.754 0.747 0.033
O 0.253 0.008 0.033

Str 70 (EZT)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.73 eV

E_{rel} : 0.30 eV/ZnO

Pore_{max} : 0.38 nm

V_{pore} : 22 %

D_{pore} : 3

cell parameters

6.893 8.088 13.962 89.45 90.00 90.00

fractional coordinates

Zn 0.500 0.133 0.926

Zn 0.759 0.875 0.884

Zn 0.241 0.875 0.884

Zn 0.500 0.540 0.823

Zn 0.000 0.616 0.807
Zn 0.500 0.884 0.693
Zn 0.000 0.960 0.677
Zn 0.741 0.625 0.616
Zn 0.259 0.625 0.616
Zn 0.000 0.367 0.574
Zn 0.793 0.000 0.500
Zn 0.207 0.000 0.500
Zn 0.000 0.633 0.426
Zn 0.741 0.375 0.384
Zn 0.259 0.375 0.384
Zn 0.000 0.040 0.323
Zn 0.500 0.116 0.307
Zn 0.000 0.384 0.193
Zn 0.500 0.460 0.177
Zn 0.759 0.125 0.116
Zn 0.241 0.125 0.116
Zn 0.500 0.867 0.074
Zn 0.707 0.500 0.000
Zn 0.293 0.500 0.000
O 0.500 0.366 0.923
O 0.760 0.625 0.885
O 0.240 0.625 0.885
O 0.500 0.954 0.824
O 0.000 0.888 0.808
O 0.500 0.612 0.692
O 0.000 0.546 0.676
O 0.740 0.875 0.615
O 0.260 0.875 0.615
O 0.000 0.134 0.577
O 0.792 0.500 0.500
O 0.208 0.500 0.500
O 0.000 0.866 0.423
O 0.740 0.125 0.385
O 0.260 0.125 0.385
O 0.000 0.454 0.324
O 0.500 0.388 0.308
O 0.000 0.112 0.192
O 0.500 0.046 0.176
O 0.760 0.375 0.115
O 0.240 0.375 0.115
O 0.500 0.634 0.077
O 0.708 1.000 0.000
O 0.292 1.000 0.000

Str 71 (EAB)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.73 eV

E_{rel} : 0.28 eV/ZnO

Pore_{max}: 0.37 nm

V_{pore} : 22 %

D_{pore} : 3

cell parameters

8.196 8.196 10.188 90.00 90.00 120.00
fractional coordinates
Zn 0.575 0.912 0.851
Zn 0.337 0.425 0.851
Zn 0.088 0.663 0.851
Zn 0.575 0.663 0.649
Zn 0.337 0.912 0.649
Zn 0.088 0.425 0.649
Zn 0.752 0.000 0.500
Zn 0.248 0.248 0.500
Zn 0.000 0.752 0.500
Zn 0.912 0.337 0.351
Zn 0.663 0.575 0.351
Zn 0.425 0.088 0.351
Zn 0.912 0.575 0.149
Zn 0.663 0.088 0.149
Zn 0.425 0.337 0.149
Zn 0.752 0.752 0.000
Zn 0.248 0.000 0.000
Zn 0.000 0.248 0.000
O 0.580 0.661 0.848
O 0.339 0.919 0.848
O 0.081 0.420 0.848
O 0.580 0.919 0.652
O 0.339 0.420 0.652
O 0.081 0.661 0.652
O 0.754 0.754 0.500
O 0.246 0.000 0.500
O 0.000 0.246 0.500
O 0.919 0.580 0.348
O 0.661 0.081 0.348
O 0.420 0.339 0.348
O 0.919 0.339 0.152
O 0.661 0.580 0.152
O 0.420 0.081 0.152
O 0.754 0.000 0.000
O 0.246 0.246 0.000
O 0.000 0.754 0.000

Str 72 (ATS)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.78 eV

E_{rel} : 0.23 eV/ZnO

Pore_{max}: 0.40 nm

V_{pore}: 22 %

D_{pore}: 1

cell parameters

8.430 13.663 3.391 90.00 90.00 89.72

fractional coordinates

Zn 0.872 0.527 0.750

Zn 0.689 0.164 0.750

Zn 0.616 0.750 0.750

Zn 0.372 0.027 0.750

Zn 0.189 0.664 0.750
Zn 0.116 0.250 0.750
Zn 0.889 0.731 0.250
Zn 0.815 0.317 0.250
Zn 0.633 0.954 0.250
Zn 0.389 0.231 0.250
Zn 0.315 0.817 0.250
Zn 0.133 0.454 0.250
O 0.888 0.248 0.750
O 0.810 0.663 0.750
O 0.634 0.028 0.750
O 0.388 0.748 0.750
O 0.310 0.163 0.750
O 0.134 0.528 0.750
O 0.695 0.818 0.250
O 0.616 0.233 0.250
O 0.370 0.954 0.250
O 0.195 0.318 0.250
O 0.116 0.733 0.250
O 0.870 0.454 0.250

Str 73 (BCB)¹⁹

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.75 eV

E_{rel} : 0.27 eV/ZnO

Pore_{max}: 0.47 nm

V_{pore}: 23 %

D_{pore}: 3

cell parameters

8.825 8.827 3.400 90.00 90.00 90.03

fractional coordinates

Zn 0.787 0.656 0.574

Zn 0.636 0.245 0.574

Zn 0.376 0.806 0.574

Zn 0.226 0.396 0.574

Zn 0.894 0.410 0.074

Zn 0.622 0.913 0.074

Zn 0.391 0.139 0.074

Zn 0.119 0.641 0.074

O 0.779 0.414 0.574

O 0.619 0.798 0.574

O 0.394 0.253 0.574

O 0.234 0.638 0.574

O 0.900 0.662 0.074

O 0.642 0.132 0.074

O 0.371 0.920 0.074

O 0.113 0.390 0.074

Str 74 (LTL)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.73 eV

E_{rel} : 0.33 eV/ZnO

Pore_{max}: 0.65 nm

V_{pore}: 24 %

D_{pore}: 3
cell parameters
11.418 11.418 10.623 90.00 90.00 120.00
fractional coordinates
Zn 0.844 0.335 0.903
Zn 0.665 0.509 0.903
Zn 0.509 0.844 0.903
Zn 0.491 0.156 0.903
Zn 0.335 0.491 0.903
Zn 0.156 0.665 0.903
Zn 0.905 0.624 0.750
Zn 0.718 0.095 0.750
Zn 0.624 0.718 0.750
Zn 0.376 0.282 0.750
Zn 0.282 0.905 0.750
Zn 0.095 0.376 0.750
Zn 0.844 0.335 0.597
Zn 0.665 0.509 0.597
Zn 0.509 0.844 0.597
Zn 0.491 0.156 0.597
Zn 0.335 0.491 0.597
Zn 0.156 0.665 0.597
Zn 0.844 0.509 0.403
Zn 0.665 0.156 0.403
Zn 0.509 0.665 0.403
Zn 0.491 0.335 0.403
Zn 0.335 0.844 0.403
Zn 0.156 0.491 0.403
Zn 0.905 0.282 0.250
Zn 0.718 0.624 0.250
Zn 0.624 0.905 0.250
Zn 0.376 0.095 0.250
Zn 0.282 0.376 0.250
Zn 0.095 0.718 0.250
Zn 0.844 0.509 0.097
Zn 0.665 0.156 0.097
Zn 0.509 0.665 0.097
Zn 0.491 0.335 0.097
Zn 0.335 0.844 0.097
Zn 0.156 0.491 0.097
O 0.849 0.511 0.906
O 0.662 0.151 0.906
O 0.511 0.662 0.906
O 0.489 0.338 0.906
O 0.338 0.849 0.906
O 0.151 0.489 0.906
O 0.899 0.272 0.750
O 0.728 0.627 0.750
O 0.627 0.899 0.750
O 0.373 0.101 0.750
O 0.272 0.373 0.750
O 0.101 0.728 0.750

O 0.849 0.511 0.594
O 0.662 0.151 0.594
O 0.511 0.662 0.594
O 0.489 0.338 0.594
O 0.338 0.849 0.594
O 0.151 0.489 0.594
O 0.849 0.338 0.406
O 0.662 0.511 0.406
O 0.511 0.849 0.406
O 0.489 0.151 0.406
O 0.338 0.489 0.406
O 0.151 0.662 0.406
O 0.899 0.627 0.250
O 0.728 0.101 0.250
O 0.627 0.728 0.250
O 0.373 0.272 0.250
O 0.272 0.899 0.250
O 0.101 0.373 0.250
O 0.849 0.338 0.094
O 0.662 0.511 0.094
O 0.511 0.849 0.094
O 0.489 0.151 0.094
O 0.338 0.489 0.094
O 0.151 0.662 0.094

Str 75 (VFI)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.71 eV

E_{rel} : 0.28 eV/ZnO

Pore_{max}: 0.57 nm

V_{pore}: 25 %

D_{pore}: 1

cell parameters

11.552 11.552 5.372 90.00 90.00 120.01

fractional coordinates

Zn 1.000 0.377 0.583

Zn 0.377 1.000 0.583

Zn 0.623 0.623 0.583

Zn 0.674 0.168 0.560

Zn 0.168 0.674 0.560

Zn 0.506 0.832 0.560

Zn 0.494 0.326 0.560

Zn 0.326 0.494 0.560

Zn 0.832 0.506 0.560

Zn 0.623 0.000 0.083

Zn 0.000 0.623 0.083

Zn 0.377 0.377 0.083

Zn 0.832 0.326 0.060

Zn 0.494 0.168 0.060

Zn 0.326 0.832 0.060

Zn 0.168 0.494 0.060

Zn 0.674 0.506 0.060

Zn 0.506 0.674 0.060

O 0.666 0.170 0.933
O 0.504 0.334 0.933
O 0.496 0.830 0.933
O 0.334 0.504 0.933
O 0.170 0.666 0.933
O 0.830 0.496 0.933
O 1.000 0.351 0.930
O 0.351 1.000 0.930
O 0.649 0.649 0.930
O 0.830 0.334 0.433
O 0.504 0.170 0.433
O 0.334 0.830 0.433
O 0.170 0.504 0.433
O 0.666 0.496 0.433
O 0.496 0.666 0.433
O 0.649 0.000 0.430
O 0.000 0.649 0.430
O 0.351 0.351 0.430

Str 76 (CHA)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.21 eV

E_{rel} : 0.30 eV/ZnO

Pore_{max} : 0.39 nm

V_{pore} : 26 %

D_{pore} : 3

cell parameters

8.575 8.577 9.857 90.00 90.00 120.00

fractional coordinates

Zn 0.566 0.919 0.962

Zn 0.092 0.672 0.962

Zn 0.340 0.446 0.962

Zn 0.326 0.912 0.752

Zn 0.573 0.686 0.752

Zn 0.099 0.439 0.752

Zn 0.899 0.586 0.629

Zn 0.673 0.112 0.629

Zn 0.426 0.339 0.629

Zn 0.907 0.353 0.419

Zn 0.659 0.579 0.419

Zn 0.433 0.105 0.419

Zn 0.007 0.779 0.296

Zn 0.759 0.005 0.295

Zn 0.233 0.253 0.295

Zn 0.992 0.246 0.086

Zn 0.240 0.019 0.086

Zn 0.766 0.772 0.086

O 0.093 0.446 0.961

O 0.566 0.673 0.961

O 0.339 0.919 0.961

O 0.100 0.685 0.753

O 0.573 0.912 0.753

O 0.326 0.439 0.753

O 0.899 0.339 0.628
O 0.426 0.112 0.628
O 0.672 0.585 0.627
O 0.906 0.579 0.420
O 0.660 0.106 0.420
O 0.433 0.352 0.420
O 0.233 0.006 0.294
O 0.006 0.252 0.294
O 0.760 0.779 0.294
O 0.993 0.773 0.087
O 0.766 0.019 0.087
O 0.239 0.246 0.087

Str 77 (GME)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.07 eV

E_{rel} : 0.29 eV/ZnO

Pore_{max}: 0.43 nm

V_{pore}: 26 %

D_{pore}: 3

cell parameters

8.670 8.670 6.440 90.00 90.00 120.00

fractional coordinates

Zn 0.571 0.673 0.910

Zn 0.327 0.898 0.910

Zn 0.102 0.429 0.910

Zn 0.571 0.898 0.590

Zn 0.327 0.429 0.590

Zn 0.102 0.673 0.590

Zn 0.898 0.327 0.410

Zn 0.673 0.571 0.410

Zn 0.429 0.102 0.410

Zn 0.898 0.571 0.090

Zn 0.673 0.102 0.090

Zn 0.429 0.327 0.090

O 0.569 0.896 0.910

O 0.327 0.431 0.910

O 0.104 0.673 0.910

O 0.569 0.673 0.590

O 0.327 0.896 0.590

O 0.104 0.431 0.590

O 0.896 0.569 0.410

O 0.673 0.104 0.410

O 0.431 0.327 0.410

O 0.896 0.327 0.090

O 0.673 0.569 0.090

O 0.431 0.104 0.090

Str 78 (AFR)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.04 eV

E_{rel} : 0.34 eV/ZnO

Pore_{max}: 0.48 nm

V_{pore}: 28 %

D_{pore}: 2
cell parameters
14.284 8.771 9.083 90.00 90.00 90.00
fractional coordinates
Zn 0.816 0.622 0.938
Zn 0.684 0.878 0.938
Zn 0.483 0.860 0.923
Zn 0.017 0.640 0.923
Zn 0.412 0.454 0.922
Zn 0.088 0.046 0.922
Zn 0.909 0.862 0.773
Zn 0.591 0.638 0.773
Zn 0.409 0.138 0.727
Zn 0.091 0.362 0.727
Zn 0.912 0.546 0.578
Zn 0.588 0.954 0.578
Zn 0.983 0.140 0.577
Zn 0.517 0.360 0.577
Zn 0.316 0.378 0.562
Zn 0.184 0.122 0.562
Zn 0.816 0.878 0.438
Zn 0.684 0.622 0.438
Zn 0.483 0.640 0.423
Zn 0.017 0.860 0.423
Zn 0.412 0.046 0.422
Zn 0.088 0.454 0.422
Zn 0.909 0.638 0.273
Zn 0.591 0.862 0.273
Zn 0.409 0.362 0.227
Zn 0.091 0.138 0.227
Zn 0.912 0.954 0.078
Zn 0.588 0.546 0.078
Zn 0.983 0.360 0.077
Zn 0.517 0.140 0.077
Zn 0.316 0.122 0.062
Zn 0.184 0.378 0.062
O 0.817 0.879 0.940
O 0.683 0.621 0.940
O 0.486 0.642 0.929
O 0.014 0.858 0.929
O 0.412 0.048 0.920
O 0.088 0.452 0.920
O 0.907 0.630 0.774
O 0.592 0.870 0.774
O 0.407 0.370 0.726
O 0.092 0.130 0.726
O 0.912 0.952 0.580
O 0.588 0.548 0.580
O 0.986 0.358 0.571
O 0.514 0.142 0.571
O 0.317 0.121 0.560
O 0.183 0.379 0.560

O 0.817 0.621 0.440
O 0.683 0.879 0.440
O 0.486 0.858 0.429
O 0.014 0.642 0.429
O 0.412 0.452 0.420
O 0.088 0.048 0.420
O 0.907 0.870 0.274
O 0.592 0.630 0.274
O 0.407 0.130 0.226
O 0.092 0.370 0.226
O 0.912 0.548 0.080
O 0.588 0.952 0.080
O 0.986 0.142 0.071
O 0.514 0.358 0.071
O 0.317 0.379 0.060
O 0.183 0.121 0.060

Str 79 (SFO)¹⁷

ΔE_{gap} (PBE_{GW-fit}): 1.03 eV

E_{rel} : 0.34 eV/ZnO

Pore_{max}: 0.47 nm

V_{pore} : 28 %

D_{pore} : 2

cell parameters

14.435 8.766 9.091 90.00 98.36 90.00

fractional coordinates

Zn 0.934 0.873 0.980

Zn 0.434 0.373 0.980

Zn 0.733 0.890 0.919

Zn 0.233 0.390 0.919

Zn 0.662 0.297 0.903

Zn 0.162 0.797 0.903

Zn 0.341 0.612 0.793

Zn 0.841 0.112 0.793

Zn 0.659 0.612 0.707

Zn 0.159 0.112 0.707

Zn 0.838 0.797 0.597

Zn 0.338 0.297 0.597

Zn 0.767 0.390 0.581

Zn 0.267 0.890 0.581

Zn 0.566 0.373 0.520

Zn 0.066 0.873 0.520

Zn 0.934 0.127 0.480

Zn 0.434 0.627 0.480

Zn 0.733 0.110 0.419

Zn 0.233 0.610 0.419

Zn 0.662 0.703 0.403

Zn 0.162 0.203 0.403

Zn 0.841 0.888 0.293

Zn 0.341 0.388 0.293

Zn 0.659 0.388 0.207

Zn 0.159 0.888 0.207

Zn 0.838 0.203 0.097
Zn 0.338 0.703 0.097
Zn 0.767 0.610 0.081
Zn 0.267 0.110 0.081
Zn 0.566 0.627 0.020
Zn 0.066 0.127 0.020
O 0.933 0.129 0.981
O 0.433 0.629 0.981
O 0.736 0.108 0.925
O 0.236 0.608 0.925
O 0.663 0.702 0.900
O 0.163 0.202 0.900
O 0.843 0.880 0.795
O 0.343 0.380 0.795
O 0.657 0.380 0.705
O 0.157 0.880 0.705
O 0.837 0.202 0.600
O 0.337 0.702 0.600
O 0.764 0.608 0.575
O 0.264 0.108 0.575
O 0.567 0.629 0.519
O 0.067 0.129 0.519
O 0.933 0.871 0.481
O 0.433 0.371 0.481
O 0.736 0.892 0.425
O 0.236 0.392 0.425
O 0.663 0.298 0.400
O 0.163 0.798 0.400
O 0.843 0.120 0.295
O 0.343 0.620 0.295
O 0.657 0.620 0.205
O 0.157 0.120 0.205
O 0.837 0.798 0.100
O 0.337 0.298 0.100
O 0.764 0.392 0.075
O 0.264 0.892 0.075
O 0.567 0.371 0.019
O 0.067 0.871 0.019

Str 80 (USI)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.77 eV

E_{rel} : 0.44 eV/ZnO

Pore_{max} : 0.42 nm

V_{pore} : 29 %

D_{pore} : 2

cell parameters

13.825 8.406 6.433 90.00 108.75 90.15

fractional coordinates

Zn 0.286 0.118 0.896

Zn 0.786 0.618 0.896

Zn 0.689 0.177 0.801

Zn 0.189 0.677 0.801

Zn 0.841 0.329 0.653
Zn 0.341 0.829 0.653
Zn 0.785 0.886 0.635
Zn 0.285 0.386 0.635
Zn 0.072 0.368 0.535
Zn 0.572 0.868 0.535
Zn 0.928 0.632 0.465
Zn 0.428 0.132 0.465
Zn 0.715 0.614 0.365
Zn 0.215 0.114 0.365
Zn 0.659 0.171 0.347
Zn 0.159 0.671 0.347
Zn 0.811 0.323 0.199
Zn 0.311 0.823 0.199
Zn 0.214 0.382 0.104
Zn 0.714 0.882 0.104
O 0.785 0.382 0.892
O 0.285 0.882 0.892
O 0.183 0.306 0.800
O 0.683 0.806 0.800
O 0.847 0.678 0.663
O 0.347 0.178 0.663
O 0.785 0.108 0.633
O 0.285 0.608 0.633
O 0.573 0.129 0.531
O 0.073 0.629 0.531
O 0.927 0.371 0.469
O 0.427 0.871 0.469
O 0.715 0.392 0.367
O 0.215 0.892 0.367
O 0.153 0.322 0.337
O 0.653 0.822 0.337
O 0.817 0.694 0.200
O 0.317 0.194 0.200
O 0.715 0.118 0.108
O 0.215 0.618 0.108

Str 81 (LTA)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.43 eV

E_{rel} : 0.25 eV/ZnO

Pore_{max}: 0.64 nm

V_{pore} : 30 %

D_{pore} : 3

cell parameters

10.759 10.759 10.759 60.00 60.00 60.00

fractional coordinates

Zn 0.719 0.281 0.914

Zn 0.281 0.086 0.914

Zn 0.086 0.719 0.914

Zn 0.586 0.219 0.781

Zn 0.414 0.586 0.781

Zn 0.219 0.414 0.781

Zn 0.914 0.086 0.719
Zn 0.281 0.914 0.719
Zn 0.086 0.281 0.719
Zn 0.781 0.414 0.586
Zn 0.414 0.219 0.586
Zn 0.219 0.781 0.586
Zn 0.781 0.219 0.414
Zn 0.586 0.781 0.414
Zn 0.219 0.586 0.414
Zn 0.914 0.719 0.281
Zn 0.719 0.086 0.281
Zn 0.086 0.914 0.281
Zn 0.781 0.586 0.219
Zn 0.586 0.414 0.219
Zn 0.414 0.781 0.219
Zn 0.914 0.281 0.086
Zn 0.719 0.914 0.086
Zn 0.281 0.719 0.086
O 0.720 0.089 0.911
O 0.280 0.720 0.911
O 0.089 0.280 0.911
O 0.589 0.411 0.780
O 0.411 0.220 0.780
O 0.220 0.589 0.780
O 0.911 0.280 0.720
O 0.280 0.089 0.720
O 0.089 0.911 0.720
O 0.780 0.220 0.589
O 0.411 0.780 0.589
O 0.220 0.411 0.589
O 0.780 0.589 0.411
O 0.589 0.220 0.411
O 0.220 0.780 0.411
O 0.911 0.089 0.280
O 0.720 0.911 0.280
O 0.089 0.720 0.280
O 0.780 0.411 0.220
O 0.589 0.780 0.220
O 0.411 0.589 0.220
O 0.911 0.720 0.089
O 0.720 0.280 0.089
O 0.280 0.911 0.089

Str 82 (AFS)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.22 eV

E_{rel} : 0.36 eV/ZnO

Pore_{max} : 0.56 nm

V_{pore} : 31 %

D_{pore} : 3

cell parameters

8.526 8.526 16.493 90.00 90.00 120.00

fractional coordinates

Zn 0.667 0.333 0.945
Zn 0.517 0.645 0.868
Zn 0.355 0.872 0.868
Zn 0.128 0.483 0.868
Zn 0.864 0.574 0.811
Zn 0.710 0.136 0.811
Zn 0.426 0.290 0.811
Zn 0.574 0.864 0.689
Zn 0.290 0.426 0.689
Zn 0.136 0.710 0.689
Zn 0.872 0.355 0.632
Zn 0.645 0.517 0.632
Zn 0.483 0.128 0.632
Zn 0.333 0.667 0.555
Zn 0.667 0.333 0.445
Zn 0.517 0.872 0.368
Zn 0.355 0.483 0.368
Zn 0.128 0.645 0.368
Zn 0.864 0.290 0.311
Zn 0.710 0.574 0.311
Zn 0.426 0.136 0.311
Zn 0.574 0.710 0.189
Zn 0.290 0.864 0.189
Zn 0.136 0.426 0.189
Zn 0.872 0.517 0.132
Zn 0.645 0.128 0.132
Zn 0.483 0.355 0.132
Zn 0.333 0.667 0.055
O 0.333 0.667 0.940
O 0.869 0.349 0.873
O 0.651 0.520 0.873
O 0.480 0.131 0.873
O 0.576 0.867 0.810
O 0.291 0.424 0.810
O 0.133 0.709 0.810
O 0.867 0.576 0.690
O 0.709 0.133 0.690
O 0.424 0.291 0.690
O 0.520 0.651 0.627
O 0.349 0.869 0.627
O 0.131 0.480 0.627
O 0.667 0.333 0.560
O 0.333 0.667 0.440
O 0.869 0.520 0.373
O 0.651 0.131 0.373
O 0.480 0.349 0.373
O 0.576 0.709 0.310
O 0.291 0.867 0.310
O 0.133 0.424 0.310
O 0.867 0.291 0.190
O 0.709 0.576 0.190
O 0.424 0.133 0.190

O 0.520 0.869 0.127
O 0.349 0.480 0.127
O 0.131 0.651 0.127
O 0.667 0.333 0.060

Str 83 (SAO)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.18 eV

E_{rel} : 0.38 eV/ZnO

Pore_{max}: 0.49 nm

V_{pore} : 34 %

D_{pore} : 3

cell parameters

8.925 8.925 13.591 90.00 90.00 90.00

fractional coordinates

Zn 0.606 0.877 0.948

Zn 0.394 0.123 0.948

Zn 0.896 0.878 0.874

Zn 0.104 0.122 0.874

Zn 0.700 0.117 0.807

Zn 0.300 0.883 0.807

Zn 0.617 0.800 0.693

Zn 0.383 0.200 0.693

Zn 0.622 0.396 0.626

Zn 0.378 0.604 0.626

Zn 0.623 0.106 0.552

Zn 0.377 0.894 0.552

Zn 0.704 0.704 0.500

Zn 0.296 0.296 0.500

Zn 0.894 0.377 0.448

Zn 0.106 0.623 0.448

Zn 0.604 0.378 0.374

Zn 0.396 0.622 0.374

Zn 0.800 0.617 0.307

Zn 0.200 0.383 0.307

Zn 0.883 0.300 0.193

Zn 0.117 0.700 0.193

Zn 0.878 0.896 0.126

Zn 0.122 0.104 0.126

Zn 0.877 0.606 0.052

Zn 0.123 0.394 0.052

Zn 0.796 0.204 0.000

Zn 0.204 0.796 0.000

O 0.607 0.121 0.947

O 0.393 0.879 0.947

O 0.894 0.127 0.876

O 0.106 0.873 0.876

O 0.703 0.885 0.807

O 0.297 0.115 0.807

O 0.615 0.203 0.693

O 0.385 0.797 0.693

O 0.627 0.606 0.624

O 0.373 0.394 0.624

O 0.621 0.893 0.553
O 0.379 0.107 0.553
O 0.704 0.296 0.500
O 0.296 0.704 0.500
O 0.893 0.621 0.447
O 0.107 0.379 0.447
O 0.606 0.627 0.376
O 0.394 0.373 0.376
O 0.797 0.385 0.307
O 0.203 0.615 0.307
O 0.885 0.703 0.193
O 0.115 0.297 0.193
O 0.873 0.106 0.124
O 0.127 0.894 0.124
O 0.879 0.393 0.053
O 0.121 0.607 0.053
O 0.796 0.796 0.000
O 0.204 0.204 0.000

Str 84 (BBZ)¹⁹

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.83 eV

E_{rel} : 0.25 eV/ZnO

Pore_{max}: 0.84 nm

V_{pore} : 36 %

D_{pore} : 3

cell parameters

12.902 12.901 3.370 90.00 90.00 120.01

fractional coordinates

Zn 0.822 0.334 0.500

Zn 0.673 0.512 0.500

Zn 0.498 0.836 0.500

Zn 0.495 0.185 0.500

Zn 0.320 0.509 0.500

Zn 0.172 0.687 0.500

Zn 0.909 0.548 0.000

Zn 0.622 0.099 0.000

Zn 0.534 0.636 0.000

Zn 0.460 0.386 0.000

Zn 0.372 0.923 0.000

Zn 0.085 0.474 0.000

O 0.819 0.503 0.500

O 0.667 0.189 0.500

O 0.504 0.340 0.500

O 0.489 0.681 0.500

O 0.326 0.832 0.500

O 0.175 0.518 0.500

O 0.912 0.375 0.000

O 0.632 0.561 0.000

O 0.547 0.926 0.000

O 0.447 0.096 0.000

O 0.362 0.461 0.000

O 0.082 0.646 0.000

Str 85 (FAU)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.16 eV

E_{rel} : 0.34 eV/ZnO

Pore_{max}: 0.67 nm

V_{pore} : 38 %

D_{pore} : 3

cell parameters

15.834 15.834 15.834 90.00 90.00 90.00

fractional coordinates

Zn 0.880 0.196 0.965

Zn 0.870 0.554 0.965

Zn 0.380 0.696 0.965

Zn 0.370 0.054 0.965

Zn 0.715 0.120 0.946

Zn 0.535 0.130 0.946

Zn 0.215 0.620 0.946

Zn 0.035 0.630 0.946

Zn 0.696 0.465 0.880

Zn 0.554 0.785 0.880

Zn 0.196 0.965 0.880

Zn 0.054 0.285 0.880

Zn 0.696 0.285 0.870

Zn 0.554 0.965 0.870

Zn 0.196 0.785 0.870

Zn 0.054 0.465 0.870

Zn 0.715 0.630 0.804

Zn 0.535 0.620 0.804

Zn 0.215 0.130 0.804

Zn 0.035 0.120 0.804

Zn 0.880 0.554 0.785

Zn 0.870 0.196 0.785

Zn 0.380 0.054 0.785

Zn 0.370 0.696 0.785

Zn 0.630 0.804 0.715

Zn 0.620 0.446 0.715

Zn 0.130 0.304 0.715

Zn 0.120 0.946 0.715

Zn 0.965 0.380 0.696

Zn 0.785 0.370 0.696

Zn 0.465 0.880 0.696

Zn 0.285 0.870 0.696

Zn 0.946 0.035 0.630

Zn 0.804 0.715 0.630

Zn 0.446 0.535 0.630

Zn 0.304 0.215 0.630

Zn 0.946 0.215 0.620

Zn 0.804 0.535 0.620

Zn 0.446 0.715 0.620

Zn 0.304 0.035 0.620

Zn 0.965 0.870 0.554

Zn 0.785 0.880 0.554

Zn 0.465 0.370 0.554
Zn 0.285 0.380 0.554
Zn 0.630 0.446 0.535
Zn 0.620 0.804 0.535
Zn 0.130 0.946 0.535
Zn 0.120 0.304 0.535
Zn 0.880 0.696 0.465
Zn 0.870 0.054 0.465
Zn 0.380 0.196 0.465
Zn 0.370 0.554 0.465
Zn 0.715 0.620 0.446
Zn 0.535 0.630 0.446
Zn 0.215 0.120 0.446
Zn 0.035 0.130 0.446
Zn 0.696 0.965 0.380
Zn 0.554 0.285 0.380
Zn 0.196 0.465 0.380
Zn 0.054 0.785 0.380
Zn 0.696 0.785 0.370
Zn 0.554 0.465 0.370
Zn 0.196 0.285 0.370
Zn 0.054 0.965 0.370
Zn 0.715 0.130 0.304
Zn 0.535 0.120 0.304
Zn 0.215 0.630 0.304
Zn 0.035 0.620 0.304
Zn 0.880 0.054 0.285
Zn 0.870 0.696 0.285
Zn 0.380 0.554 0.285
Zn 0.370 0.196 0.285
Zn 0.630 0.304 0.215
Zn 0.620 0.946 0.215
Zn 0.130 0.804 0.215
Zn 0.120 0.446 0.215
Zn 0.965 0.880 0.196
Zn 0.785 0.870 0.196
Zn 0.465 0.380 0.196
Zn 0.285 0.370 0.196
Zn 0.946 0.535 0.130
Zn 0.804 0.215 0.130
Zn 0.446 0.035 0.130
Zn 0.304 0.715 0.130
Zn 0.946 0.715 0.120
Zn 0.804 0.035 0.120
Zn 0.446 0.215 0.120
Zn 0.304 0.535 0.120
Zn 0.965 0.370 0.054
Zn 0.785 0.380 0.054
Zn 0.465 0.870 0.054
Zn 0.285 0.880 0.054
Zn 0.630 0.946 0.035
Zn 0.620 0.304 0.035

Zn 0.130 0.446 0.035
Zn 0.120 0.804 0.035
O 0.695 0.380 0.966
O 0.555 0.870 0.966
O 0.195 0.880 0.966
O 0.055 0.370 0.966
O 0.630 0.034 0.945
O 0.620 0.216 0.945
O 0.130 0.534 0.945
O 0.120 0.716 0.945
O 0.966 0.195 0.880
O 0.784 0.555 0.880
O 0.466 0.695 0.880
O 0.284 0.055 0.880
O 0.966 0.555 0.870
O 0.784 0.195 0.870
O 0.466 0.055 0.870
O 0.284 0.695 0.870
O 0.630 0.716 0.805
O 0.620 0.534 0.805
O 0.130 0.216 0.805
O 0.120 0.034 0.805
O 0.695 0.370 0.784
O 0.555 0.880 0.784
O 0.195 0.870 0.784
O 0.055 0.380 0.784
O 0.945 0.120 0.716
O 0.805 0.630 0.716
O 0.445 0.620 0.716
O 0.305 0.130 0.716
O 0.880 0.466 0.695
O 0.870 0.284 0.695
O 0.380 0.966 0.695
O 0.370 0.784 0.695
O 0.716 0.805 0.630
O 0.534 0.445 0.630
O 0.216 0.305 0.630
O 0.034 0.945 0.630
O 0.716 0.445 0.620
O 0.534 0.805 0.620
O 0.216 0.945 0.620
O 0.034 0.305 0.620
O 0.880 0.784 0.555
O 0.870 0.966 0.555
O 0.380 0.284 0.555
O 0.370 0.466 0.555
O 0.945 0.130 0.534
O 0.805 0.620 0.534
O 0.445 0.630 0.534
O 0.305 0.120 0.534
O 0.695 0.880 0.466
O 0.555 0.370 0.466

O 0.195 0.380 0.466
O 0.055 0.870 0.466
O 0.630 0.534 0.445
O 0.620 0.716 0.445
O 0.130 0.034 0.445
O 0.120 0.216 0.445
O 0.966 0.695 0.380
O 0.784 0.055 0.380
O 0.466 0.195 0.380
O 0.284 0.555 0.380
O 0.966 0.055 0.370
O 0.784 0.695 0.370
O 0.466 0.555 0.370
O 0.284 0.195 0.370
O 0.630 0.216 0.305
O 0.620 0.034 0.305
O 0.130 0.716 0.305
O 0.120 0.534 0.305
O 0.695 0.870 0.284
O 0.555 0.380 0.284
O 0.195 0.370 0.284
O 0.055 0.880 0.284
O 0.945 0.620 0.216
O 0.805 0.130 0.216
O 0.445 0.120 0.216
O 0.305 0.630 0.216
O 0.880 0.966 0.195
O 0.870 0.784 0.195
O 0.380 0.466 0.195
O 0.370 0.284 0.195
O 0.716 0.305 0.130
O 0.534 0.945 0.130
O 0.216 0.805 0.130
O 0.034 0.445 0.130
O 0.716 0.945 0.120
O 0.534 0.305 0.120
O 0.216 0.445 0.120
O 0.034 0.805 0.120
O 0.880 0.284 0.055
O 0.870 0.466 0.055
O 0.380 0.784 0.055
O 0.370 0.966 0.055
O 0.945 0.630 0.034
O 0.805 0.120 0.034
O 0.445 0.130 0.034
O 0.305 0.620 0.034

Str 86 (EMT)¹⁷

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 1.16 eV

E_{rel} : 0.34 eV/ZnO

Pore_{max} : 0.69 nm

V_{pore} : 38 %

D_{pore}: 3
cell parameters
11.201 11.201 18.270 89.99 90.00 120.00
fractional coordinates
Zn 0.261 0.213 0.945
Zn 0.799 0.561 0.945
Zn 0.451 0.751 0.945
Zn 0.345 0.015 0.911
Zn 0.168 0.667 0.911
Zn 0.998 0.844 0.911
Zn 0.569 0.272 0.857
Zn 0.202 0.443 0.857
Zn 0.740 0.810 0.857
Zn 0.105 0.078 0.816
Zn 0.472 0.907 0.816
Zn 0.934 0.540 0.816
Zn 0.329 0.335 0.762
Zn 0.677 0.506 0.762
Zn 0.506 0.683 0.762
Zn 0.413 0.137 0.727
Zn 0.223 0.599 0.727
Zn 0.875 0.789 0.727
Zn 0.167 0.023 0.642
Zn 0.355 0.845 0.642
Zn 0.989 0.657 0.642
Zn 0.355 0.023 0.531
Zn 0.168 0.657 0.531
Zn 0.989 0.845 0.531
Zn 0.224 0.138 0.445
Zn 0.414 0.789 0.445
Zn 0.875 0.599 0.445
Zn 0.329 0.507 0.410
Zn 0.506 0.336 0.410
Zn 0.677 0.684 0.410
Zn 0.472 0.078 0.357
Zn 0.106 0.541 0.357
Zn 0.934 0.907 0.357
Zn 0.202 0.272 0.316
Zn 0.741 0.443 0.316
Zn 0.570 0.811 0.316
Zn 0.169 0.015 0.262
Zn 0.998 0.667 0.262
Zn 0.346 0.844 0.262
Zn 0.451 0.213 0.227
Zn 0.261 0.561 0.227
Zn 0.800 0.751 0.227
Zn 0.319 0.327 0.142
Zn 0.507 0.693 0.142
Zn 0.686 0.505 0.142
Zn 0.507 0.327 0.031
Zn 0.319 0.505 0.031
Zn 0.685 0.693 0.031

O 0.451 0.211 0.946
O 0.259 0.561 0.945
O 0.801 0.753 0.945
O 0.169 0.016 0.912
O 0.346 0.843 0.912
O 0.996 0.666 0.912
O 0.200 0.269 0.857
O 0.743 0.443 0.857
O 0.569 0.813 0.857
O 0.474 0.080 0.816
O 0.105 0.538 0.816
O 0.932 0.907 0.816
O 0.329 0.507 0.761
O 0.505 0.334 0.761
O 0.678 0.683 0.761
O 0.223 0.139 0.727
O 0.415 0.789 0.727
O 0.873 0.597 0.727
O 0.357 0.023 0.641
O 0.165 0.655 0.641
O 0.989 0.847 0.641
O 0.165 0.023 0.532
O 0.357 0.847 0.532
O 0.990 0.655 0.532
O 0.416 0.140 0.445
O 0.224 0.597 0.445
O 0.873 0.789 0.445
O 0.329 0.335 0.412
O 0.505 0.684 0.412
O 0.678 0.508 0.411
O 0.105 0.081 0.357
O 0.475 0.908 0.357
O 0.933 0.538 0.357
O 0.570 0.270 0.316
O 0.200 0.443 0.316
O 0.743 0.813 0.315
O 0.346 0.016 0.261
O 0.997 0.843 0.261
O 0.170 0.667 0.261
O 0.259 0.211 0.227
O 0.452 0.754 0.227
O 0.802 0.561 0.227
O 0.318 0.503 0.141
O 0.509 0.327 0.141
O 0.685 0.695 0.141
O 0.317 0.327 0.032
O 0.509 0.695 0.032
O 0.685 0.503 0.032

Str 87 (WZ-ZnO-NP-1)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.21 eV

E_{rel} : 0.08 eV/ZnO

Pore_{max}: 0.53 nm

V_{pore}: 7 %

D_{pore}: 1

cell parameters

19.702 19.702 5.309 90.00 90.00 120.00

fractional coordinates

Zn 0.889 0.111 0.999

Zn 0.722 0.945 0.999

Zn 0.889 0.444 0.999

Zn 0.722 0.444 0.999

Zn 0.389 0.945 0.999

Zn 0.389 0.111 0.999

Zn 0.890 0.278 0.999

Zn 0.555 0.943 0.999

Zn 0.555 0.278 0.999

Zn 0.553 0.775 0.998

Zn 0.553 0.444 0.998

Zn 0.389 0.775 0.998

Zn 0.389 0.281 0.998

Zn 0.058 0.444 0.998

Zn 0.058 0.281 0.998

Zn 0.455 0.743 0.526

Zn 0.455 0.379 0.526

Zn 0.091 0.379 0.526

Zn 0.778 0.222 0.501

Zn 0.611 0.222 0.501

Zn 0.611 0.055 0.501

Zn 0.778 0.389 0.501

Zn 0.778 0.056 0.501

Zn 0.445 0.056 0.501

Zn 0.945 0.889 0.501

Zn 0.945 0.722 0.501

Zn 0.111 0.889 0.501

Zn 0.943 0.389 0.501

Zn 0.943 0.220 0.501

Zn 0.613 0.891 0.501

Zn 0.613 0.389 0.501

Zn 0.444 0.891 0.501

Zn 0.444 0.220 0.501

Zn 0.945 0.556 0.499

Zn 0.945 0.055 0.499

Zn 0.778 0.556 0.499

Zn 0.778 0.889 0.499

Zn 0.277 0.889 0.499

Zn 0.277 0.055 0.499

Zn 0.777 0.722 0.499

Zn 0.112 0.722 0.499

Zn 0.112 0.057 0.499

Zn 0.609 0.719 0.498

Zn 0.609 0.556 0.498

Zn 0.277 0.719 0.498

Zn 0.277 0.225 0.498

Zn 0.114 0.556 0.498
Zn 0.114 0.225 0.498
Zn 0.212 0.621 0.026
Zn 0.212 0.257 0.026
Zn 0.576 0.621 0.026
Zn 0.889 0.778 0.001
Zn 0.056 0.945 0.001
Zn 0.056 0.778 0.001
Zn 0.889 0.944 0.001
Zn 0.889 0.611 0.001
Zn 0.222 0.944 0.001
Zn 0.722 0.278 0.001
Zn 0.722 0.111 0.001
Zn 0.556 0.111 0.001
Zn 0.724 0.780 0.001
Zn 0.724 0.611 0.001
Zn 0.223 0.780 0.001
Zn 0.223 0.109 0.001
Zn 0.053 0.611 0.001
Zn 0.053 0.109 0.001
O 0.778 0.222 0.880
O 0.611 0.222 0.880
O 0.611 0.055 0.880
O 0.945 0.889 0.880
O 0.945 0.722 0.880
O 0.111 0.889 0.880
O 0.778 0.389 0.879
O 0.778 0.056 0.879
O 0.445 0.056 0.879
O 0.777 0.722 0.879
O 0.111 0.722 0.879
O 0.111 0.056 0.879
O 0.945 0.389 0.879
O 0.945 0.222 0.879
O 0.611 0.889 0.879
O 0.611 0.389 0.879
O 0.444 0.889 0.879
O 0.444 0.222 0.879
O 0.944 0.555 0.878
O 0.944 0.055 0.878
O 0.778 0.890 0.878
O 0.778 0.555 0.878
O 0.278 0.890 0.878
O 0.278 0.055 0.878
O 0.445 0.388 0.875
O 0.445 0.724 0.875
O 0.109 0.388 0.875
O 0.612 0.724 0.875
O 0.612 0.555 0.875
O 0.278 0.724 0.875
O 0.278 0.221 0.875
O 0.110 0.555 0.875

O 0.110 0.221 0.875
O 0.889 0.778 0.380
O 0.056 0.945 0.380
O 0.056 0.778 0.380
O 0.722 0.278 0.380
O 0.722 0.111 0.380
O 0.556 0.111 0.380
O 0.889 0.944 0.379
O 0.889 0.611 0.379
O 0.222 0.944 0.379
O 0.889 0.278 0.379
O 0.555 0.944 0.379
O 0.555 0.278 0.379
O 0.722 0.778 0.379
O 0.722 0.611 0.379
O 0.223 0.778 0.379
O 0.223 0.111 0.379
O 0.055 0.611 0.379
O 0.055 0.111 0.379
O 0.888 0.445 0.378
O 0.888 0.110 0.378
O 0.723 0.945 0.378
O 0.723 0.445 0.378
O 0.389 0.945 0.378
O 0.389 0.110 0.378
O 0.557 0.612 0.375
O 0.221 0.612 0.375
O 0.221 0.276 0.375
O 0.557 0.779 0.375
O 0.557 0.445 0.375
O 0.389 0.779 0.375
O 0.389 0.276 0.375
O 0.055 0.445 0.375
O 0.055 0.276 0.375

Str 88 (WZ-ZnO-NP-2)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.28 eV

E_{rel} : 0.23 eV/ZnO

Pore_{max} : 0.39 nm

V_{pore} : 10 %

D_{pore} : 1

cell parameters

9.935 9.877 5.348 90.00 90.00 120.19

fractional coordinates

Zn 0.780 0.226 1.000

Zn 0.774 0.555 0.999

Zn 0.114 0.555 0.999

Zn 0.443 0.231 0.998

Zn 0.121 0.231 0.998

Zn 0.578 0.420 0.526

Zn 0.176 0.420 0.526

Zn 0.890 0.446 0.503

Zn 0.220 0.107 0.500
Zn 0.886 0.779 0.499
Zn 0.226 0.779 0.499
Zn 0.879 0.103 0.498
Zn 0.557 0.103 0.498
Zn 0.422 0.913 0.026
Zn 0.824 0.913 0.026
Zn 0.110 0.887 0.003
O 0.890 0.448 0.877
O 0.221 0.109 0.877
O 0.890 0.777 0.874
O 0.220 0.777 0.874
O 0.889 0.114 0.873
O 0.558 0.114 0.873
O 0.563 0.442 0.872
O 0.213 0.442 0.872
O 0.110 0.886 0.377
O 0.779 0.225 0.377
O 0.780 0.556 0.374
O 0.110 0.556 0.374
O 0.111 0.219 0.373
O 0.442 0.219 0.373
O 0.437 0.891 0.372
O 0.787 0.891 0.372

Str 89 (WZ-ZnO-NP-3)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.32 eV

E_{rel} : 0.20 eV/ZnO

Pore_{max} : 0.36 nm

V_{pore} : 10 %

D_{pore} : 1

cell parameters

21.778 8.781 5.340 90.01 89.98 87.71

fractional coordinates

Zn 0.419 0.605 0.942

Zn 0.919 0.105 0.942

Zn 0.368 0.242 0.941

Zn 0.868 0.742 0.941

Zn 0.821 0.392 0.941

Zn 0.321 0.892 0.941

Zn 0.723 0.680 0.940

Zn 0.572 0.640 0.940

Zn 0.224 0.180 0.940

Zn 0.072 0.140 0.940

Zn 0.773 0.043 0.939

Zn 0.273 0.543 0.939

Zn 0.669 0.334 0.939

Zn 0.169 0.834 0.939

Zn 0.513 0.347 0.920

Zn 0.013 0.846 0.920

Zn 0.641 0.964 0.914

Zn 0.141 0.464 0.914

Zn 0.638 0.769 0.442
Zn 0.138 0.269 0.442
Zn 0.686 0.119 0.442
Zn 0.587 0.406 0.442
Zn 0.186 0.619 0.442
Zn 0.087 0.906 0.442
Zn 0.783 0.832 0.440
Zn 0.283 0.332 0.440
Zn 0.434 0.371 0.440
Zn 0.934 0.871 0.440
Zn 0.734 0.469 0.439
Zn 0.234 0.969 0.439
Zn 0.837 0.177 0.439
Zn 0.337 0.677 0.439
Zn 0.494 0.664 0.421
Zn 0.994 0.165 0.421
Zn 0.365 0.048 0.413
Zn 0.865 0.548 0.413
O 0.514 0.313 0.570
O 0.014 0.813 0.570
O 0.627 0.976 0.567
O 0.127 0.476 0.567
O 0.418 0.595 0.566
O 0.918 0.095 0.566
O 0.574 0.630 0.566
O 0.074 0.130 0.566
O 0.366 0.248 0.566
O 0.866 0.748 0.566
O 0.818 0.390 0.565
O 0.318 0.890 0.565
O 0.722 0.683 0.563
O 0.271 0.545 0.563
O 0.771 0.045 0.563
O 0.222 0.183 0.563
O 0.669 0.333 0.563
O 0.169 0.833 0.563
O 0.492 0.697 0.071
O 0.992 0.197 0.071
O 0.140 0.263 0.066
O 0.640 0.764 0.066
O 0.432 0.380 0.066
O 0.932 0.880 0.066
O 0.588 0.416 0.066
O 0.379 0.035 0.066
O 0.879 0.535 0.066
O 0.088 0.916 0.066
O 0.689 0.122 0.065
O 0.189 0.622 0.065
O 0.284 0.328 0.063
O 0.784 0.828 0.063
O 0.736 0.467 0.063
O 0.236 0.967 0.063

O 0.337 0.678 0.063

O 0.837 0.178 0.063

Str 90 (WZ-ZnO-NP-4)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.30 eV

E_{rel} : 0.12 eV/ZnO

Pore_{max}: 0.53 nm

V_{pore} : 11 %

D_{pore} : 1

cell parameters

16.415 16.415 5.322 90.00 90.00 120.00

fractional coordinates

Zn 0.669 0.933 0.999

Zn 0.669 0.737 0.999

Zn 0.263 0.933 0.999

Zn 0.263 0.331 0.999

Zn 0.067 0.737 0.999

Zn 0.067 0.331 0.999

Zn 0.467 0.734 0.999

Zn 0.266 0.734 0.999

Zn 0.266 0.533 0.999

Zn 0.466 0.933 0.998

Zn 0.466 0.534 0.998

Zn 0.067 0.534 0.998

Zn 0.709 0.854 0.527

Zn 0.146 0.854 0.527

Zn 0.146 0.291 0.527

Zn 0.531 0.867 0.501

Zn 0.531 0.665 0.501

Zn 0.335 0.867 0.501

Zn 0.335 0.469 0.501

Zn 0.133 0.469 0.501

Zn 0.133 0.665 0.501

Zn 0.333 0.667 0.501

Zn 0.933 0.669 0.499

Zn 0.933 0.263 0.499

Zn 0.737 0.669 0.499

Zn 0.737 0.067 0.499

Zn 0.331 0.263 0.499

Zn 0.331 0.067 0.499

Zn 0.734 0.467 0.499

Zn 0.734 0.266 0.499

Zn 0.533 0.266 0.499

Zn 0.933 0.466 0.498

Zn 0.534 0.466 0.498

Zn 0.534 0.067 0.498

Zn 0.854 0.709 0.027

Zn 0.854 0.146 0.027

Zn 0.291 0.146 0.027

Zn 0.867 0.531 0.001

Zn 0.867 0.335 0.001

Zn 0.665 0.531 0.001

Zn 0.665 0.133 0.001
Zn 0.469 0.335 0.001
Zn 0.469 0.133 0.001
Zn 0.667 0.333 0.001
O 0.333 0.667 0.879
O 0.733 0.467 0.878
O 0.733 0.267 0.878
O 0.533 0.267 0.878
O 0.534 0.867 0.878
O 0.534 0.666 0.878
O 0.334 0.867 0.878
O 0.334 0.466 0.878
O 0.133 0.666 0.878
O 0.133 0.466 0.878
O 0.731 0.865 0.876
O 0.135 0.865 0.876
O 0.135 0.269 0.876
O 0.934 0.666 0.876
O 0.934 0.268 0.876
O 0.732 0.666 0.876
O 0.732 0.066 0.876
O 0.334 0.268 0.876
O 0.334 0.066 0.876
O 0.934 0.467 0.876
O 0.533 0.467 0.876
O 0.533 0.066 0.876
O 0.667 0.333 0.379
O 0.467 0.733 0.378
O 0.267 0.733 0.378
O 0.267 0.533 0.378
O 0.867 0.534 0.378
O 0.867 0.334 0.378
O 0.666 0.534 0.378
O 0.666 0.133 0.378
O 0.466 0.334 0.378
O 0.466 0.133 0.378
O 0.865 0.731 0.376
O 0.865 0.135 0.376
O 0.269 0.135 0.376
O 0.666 0.732 0.376
O 0.666 0.934 0.376
O 0.268 0.934 0.376
O 0.268 0.334 0.376
O 0.066 0.732 0.376
O 0.066 0.334 0.376
O 0.467 0.934 0.376
O 0.467 0.533 0.376
O 0.066 0.533 0.376

Str 91 (WZ-ZnO-NP-5)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.26 eV

E_{rel} : 0.13 eV/ZnO

Pore_{max}: 0.78 nm

V_{pore}: 11 %

D_{pore}: 1

cell parameters

23.047 23.047 5.318 90.00 90.00 120.00

fractional coordinates

Zn 0.476 0.953 1.000

Zn 0.476 0.095 1.000

Zn 0.190 0.667 1.000

Zn 0.190 0.095 1.000

Zn 0.048 0.953 1.000

Zn 0.048 0.667 1.000

Zn 0.619 0.954 0.999

Zn 0.189 0.524 0.999

Zn 0.907 0.954 0.999

Zn 0.907 0.524 0.999

Zn 0.619 0.236 0.999

Zn 0.189 0.236 0.999

Zn 0.906 0.808 0.997

Zn 0.474 0.808 0.997

Zn 0.906 0.669 0.997

Zn 0.474 0.237 0.997

Zn 0.335 0.669 0.997

Zn 0.335 0.237 0.997

Zn 0.819 0.608 0.524

Zn 0.535 0.782 0.524

Zn 0.535 0.324 0.524

Zn 0.361 0.608 0.524

Zn 0.819 0.782 0.524

Zn 0.361 0.324 0.524

Zn 0.238 0.905 0.502

Zn 0.952 0.333 0.502

Zn 0.952 0.191 0.502

Zn 0.810 0.191 0.502

Zn 0.093 0.332 0.501

Zn 0.810 0.332 0.501

Zn 0.810 0.050 0.501

Zn 0.381 0.047 0.501

Zn 0.381 0.905 0.501

Zn 0.238 0.762 0.501

Zn 0.238 0.047 0.501

Zn 0.096 0.905 0.501

Zn 0.096 0.762 0.501

Zn 0.095 0.048 0.501

Zn 0.524 0.048 0.501

Zn 0.095 0.619 0.501

Zn 0.380 0.189 0.500

Zn 0.954 0.763 0.500

Zn 0.380 0.763 0.500

Zn 0.953 0.476 0.500

Zn 0.953 0.048 0.500

Zn 0.095 0.476 0.500

Zn 0.667 0.190 0.500
Zn 0.667 0.048 0.500
Zn 0.095 0.190 0.500
Zn 0.954 0.619 0.499
Zn 0.954 0.907 0.499
Zn 0.524 0.189 0.499
Zn 0.524 0.907 0.499
Zn 0.236 0.189 0.499
Zn 0.236 0.619 0.499
Zn 0.808 0.906 0.497
Zn 0.808 0.474 0.497
Zn 0.669 0.906 0.497
Zn 0.237 0.474 0.497
Zn 0.669 0.335 0.497
Zn 0.237 0.335 0.497
Zn 0.324 0.535 0.024
Zn 0.782 0.535 0.024
Zn 0.608 0.819 0.024
Zn 0.608 0.361 0.024
Zn 0.782 0.819 0.024
Zn 0.324 0.361 0.024
Zn 0.905 0.238 0.002
Zn 0.333 0.952 0.002
Zn 0.191 0.952 0.002
Zn 0.191 0.810 0.002
Zn 0.332 0.810 0.001
Zn 0.332 0.093 0.001
Zn 0.050 0.810 0.001
Zn 0.905 0.381 0.001
Zn 0.905 0.096 0.001
Zn 0.762 0.238 0.001
Zn 0.047 0.381 0.001
Zn 0.047 0.238 0.001
Zn 0.762 0.096 0.001
Zn 0.048 0.095 0.001
Zn 0.619 0.095 0.001
Zn 0.048 0.524 0.001
Zn 0.763 0.954 0.000
Zn 0.189 0.380 0.000
Zn 0.763 0.380 0.000
O 0.238 0.905 0.880
O 0.952 0.333 0.880
O 0.952 0.191 0.880
O 0.810 0.191 0.880
O 0.381 0.047 0.879
O 0.381 0.905 0.879
O 0.238 0.762 0.879
O 0.238 0.047 0.879
O 0.096 0.905 0.879
O 0.096 0.762 0.879
O 0.095 0.048 0.879
O 0.524 0.048 0.879

O 0.095 0.619 0.879
O 0.094 0.333 0.879
O 0.810 0.333 0.879
O 0.810 0.049 0.879
O 0.953 0.049 0.878
O 0.953 0.476 0.878
O 0.094 0.476 0.878
O 0.094 0.190 0.878
O 0.667 0.190 0.878
O 0.667 0.049 0.878
O 0.953 0.906 0.877
O 0.953 0.619 0.877
O 0.524 0.190 0.877
O 0.524 0.906 0.877
O 0.237 0.619 0.877
O 0.237 0.190 0.877
O 0.955 0.763 0.876
O 0.379 0.763 0.876
O 0.379 0.187 0.876
O 0.236 0.475 0.875
O 0.810 0.475 0.875
O 0.810 0.907 0.875
O 0.668 0.907 0.875
O 0.668 0.332 0.875
O 0.236 0.332 0.875
O 0.813 0.765 0.872
O 0.813 0.620 0.872
O 0.523 0.765 0.872
O 0.523 0.329 0.872
O 0.378 0.620 0.872
O 0.378 0.329 0.872
O 0.905 0.238 0.380
O 0.333 0.952 0.380
O 0.191 0.952 0.380
O 0.191 0.810 0.380
O 0.905 0.381 0.379
O 0.905 0.096 0.379
O 0.047 0.381 0.379
O 0.047 0.238 0.379
O 0.762 0.238 0.379
O 0.762 0.096 0.379
O 0.048 0.095 0.379
O 0.619 0.095 0.379
O 0.048 0.524 0.379
O 0.333 0.810 0.379
O 0.333 0.094 0.379
O 0.049 0.810 0.379
O 0.476 0.953 0.378
O 0.049 0.953 0.378
O 0.476 0.094 0.378
O 0.190 0.094 0.378
O 0.190 0.667 0.378

O 0.049 0.667 0.378
O 0.906 0.953 0.377
O 0.619 0.953 0.377
O 0.190 0.524 0.377
O 0.906 0.524 0.377
O 0.190 0.237 0.377
O 0.619 0.237 0.377
O 0.763 0.955 0.376
O 0.763 0.379 0.376
O 0.187 0.379 0.376
O 0.907 0.810 0.375
O 0.475 0.810 0.375
O 0.907 0.668 0.375
O 0.475 0.236 0.375
O 0.332 0.668 0.375
O 0.332 0.236 0.375
O 0.765 0.523 0.372
O 0.620 0.378 0.372
O 0.329 0.523 0.372
O 0.765 0.813 0.372
O 0.620 0.813 0.372
O 0.329 0.378 0.372

Str 92 (WZ-ZnO-NP-6)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.28 eV

E_{rel} : 0.18 eV/ZnO

Pore_{max} : 0.56 nm

V_{pore} : 15 %

D_{pore} : 1

cell parameters

16.402 16.483 5.335 90.00 90.00 119.84

fractional coordinates

Zn 0.871 0.934 1.000

Zn 0.263 0.934 1.000

Zn 0.867 0.533 1.000

Zn 0.869 0.336 0.998

Zn 0.667 0.336 0.998

Zn 0.265 0.133 0.997

Zn 0.068 0.133 0.997

Zn 0.873 0.140 0.996

Zn 0.467 0.140 0.996

Zn 0.463 0.339 0.996

Zn 0.076 0.339 0.996

Zn 0.546 0.455 0.531

Zn 0.109 0.455 0.531

Zn 0.347 0.249 0.527

Zn 0.102 0.249 0.527

Zn 0.932 0.468 0.502

Zn 0.736 0.468 0.502

Zn 0.131 0.063 0.502

Zn 0.730 0.667 0.502

Zn 0.137 0.667 0.502

Zn 0.734 0.269 0.501
Zn 0.929 0.266 0.500
Zn 0.537 0.266 0.500
Zn 0.933 0.667 0.500
Zn 0.931 0.864 0.498
Zn 0.133 0.864 0.498
Zn 0.732 0.067 0.497
Zn 0.535 0.067 0.497
Zn 0.927 0.060 0.496
Zn 0.333 0.060 0.496
Zn 0.724 0.861 0.496
Zn 0.337 0.861 0.496
Zn 0.691 0.745 0.031
Zn 0.254 0.745 0.031
Zn 0.698 0.951 0.027
Zn 0.453 0.951 0.027
Zn 0.868 0.732 0.002
Zn 0.064 0.732 0.002
Zn 0.669 0.137 0.002
Zn 0.663 0.533 0.002
Zn 0.070 0.533 0.002
Zn 0.066 0.931 0.001
O 0.535 0.467 0.878
O 0.132 0.467 0.878
O 0.131 0.063 0.878
O 0.735 0.269 0.878
O 0.934 0.469 0.878
O 0.734 0.469 0.878
O 0.734 0.666 0.877
O 0.132 0.666 0.877
O 0.932 0.864 0.876
O 0.131 0.864 0.876
O 0.933 0.665 0.876
O 0.935 0.270 0.874
O 0.535 0.270 0.874
O 0.736 0.072 0.874
O 0.535 0.072 0.874
O 0.931 0.064 0.874
O 0.333 0.064 0.874
O 0.336 0.260 0.874
O 0.124 0.260 0.874
O 0.733 0.866 0.872
O 0.333 0.866 0.872
O 0.668 0.733 0.378
O 0.265 0.733 0.378
O 0.669 0.137 0.378
O 0.065 0.931 0.378
O 0.866 0.731 0.378
O 0.066 0.731 0.378
O 0.668 0.534 0.377
O 0.066 0.534 0.377
O 0.868 0.336 0.376

O 0.669 0.336 0.376
O 0.867 0.535 0.376
O 0.865 0.930 0.374
O 0.265 0.930 0.374
O 0.265 0.129 0.374
O 0.064 0.129 0.374
O 0.869 0.136 0.374
O 0.467 0.136 0.374
O 0.676 0.940 0.374
O 0.464 0.940 0.374
O 0.467 0.334 0.372
O 0.067 0.334 0.372

Str 93 (WZ-ZnO-NP-7)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.44 eV

E_{rel} : 0.22 eV/ZnO

Pore_{max} : 0.54 nm

V_{pore} : 15 %

D_{pore} : 1

cell parameters

22.855 11.416 5.349 90.01 90.01 60.02

fractional coordinates

Zn 0.806 0.371 0.878

Zn 0.176 0.001 0.878

Zn 0.594 0.334 0.877

Zn 0.389 0.539 0.877

Zn 0.991 0.632 0.875

Zn 0.491 0.671 0.855

Zn 0.235 0.676 0.852

Zn 0.748 0.164 0.851

Zn 0.327 0.838 0.851

Zn 0.075 0.329 0.851

Zn 0.907 0.496 0.851

Zn 0.656 0.509 0.851

Zn 0.658 0.004 0.849

Zn 0.324 0.338 0.849

Zn 0.827 0.840 0.849

Zn 0.243 0.173 0.849

Zn 0.739 0.677 0.849

Zn 0.573 0.842 0.849

Zn 0.156 0.510 0.849

Zn 0.409 0.006 0.849

Zn 0.173 0.641 0.379

Zn 0.809 0.005 0.379

Zn 0.388 0.172 0.378

Zn 0.594 0.966 0.377

Zn 0.991 0.374 0.375

Zn 0.491 0.837 0.355

Zn 0.744 0.831 0.352

Zn 0.074 0.510 0.352

Zn 0.908 0.675 0.352

Zn 0.238 0.336 0.352

Zn 0.655 0.174 0.351
Zn 0.328 0.501 0.351
Zn 0.825 0.498 0.349
Zn 0.157 0.166 0.349
Zn 0.240 0.837 0.349
Zn 0.323 1.000 0.349
Zn 0.659 0.664 0.349
Zn 0.742 0.336 0.349
Zn 0.573 0.502 0.348
Zn 0.410 0.664 0.348
O 0.491 0.836 0.730
O 0.744 0.837 0.726
O 0.239 0.341 0.726
O 0.658 0.670 0.726
O 0.325 0.003 0.726
O 0.244 0.833 0.725
O 0.906 0.669 0.725
O 0.739 0.338 0.725
O 0.823 0.506 0.725
O 0.157 0.669 0.725
O 0.076 0.499 0.725
O 0.573 0.506 0.725
O 0.409 0.670 0.725
O 0.160 0.170 0.725
O 0.401 0.173 0.725
O 0.825 0.002 0.725
O 0.581 0.993 0.724
O 0.321 0.507 0.724
O 0.661 0.168 0.724
O 0.991 0.346 0.723
O 0.491 0.672 0.229
O 0.326 0.834 0.226
O 0.741 0.671 0.226
O 0.242 0.170 0.226
O 0.574 0.835 0.226
O 0.657 0.504 0.226
O 0.408 0.001 0.226
O 0.906 0.506 0.225
O 0.077 0.335 0.225
O 0.661 0.001 0.225
O 0.321 0.341 0.225
O 0.820 0.343 0.225
O 0.162 0.001 0.225
O 0.241 0.670 0.225
O 0.741 0.171 0.224
O 0.825 0.837 0.224
O 0.157 0.505 0.224
O 0.579 0.337 0.223
O 0.991 0.660 0.223
O 0.404 0.510 0.223

Str 94 (WZ-ZnO-NP-8)

ΔE_{gap} (PBE_{GW-fit}): 0.38 eV

E_{rel} : 0.18 eV/ZnO

Pore_{max}: 0.78 nm

V_{pore} : 16 %

D_{pore} : 1

cell parameters

19.795 19.795 5.331 90.00 90.00 120.00

fractional coordinates

Zn 0.891 0.946 0.998

Zn 0.891 0.445 0.998

Zn 0.555 0.946 0.998

Zn 0.555 0.109 0.998

Zn 0.054 0.445 0.998

Zn 0.054 0.109 0.998

Zn 0.389 0.944 0.998

Zn 0.056 0.944 0.998

Zn 0.056 0.611 0.998

Zn 0.890 0.776 0.998

Zn 0.890 0.614 0.998

Zn 0.386 0.776 0.998

Zn 0.386 0.110 0.998

Zn 0.224 0.614 0.998

Zn 0.224 0.110 0.998

Zn 0.789 0.746 0.525

Zn 0.789 0.542 0.525

Zn 0.458 0.746 0.525

Zn 0.458 0.211 0.525

Zn 0.254 0.542 0.525

Zn 0.254 0.211 0.525

Zn 0.943 0.221 0.502

Zn 0.779 0.221 0.502

Zn 0.779 0.057 0.502

Zn 0.277 0.889 0.501

Zn 0.111 0.889 0.501

Zn 0.111 0.723 0.501

Zn 0.946 0.723 0.501

Zn 0.277 0.723 0.501

Zn 0.277 0.054 0.501

Zn 0.946 0.891 0.498

Zn 0.946 0.555 0.498

Zn 0.445 0.891 0.498

Zn 0.445 0.054 0.498

Zn 0.109 0.555 0.498

Zn 0.109 0.054 0.498

Zn 0.944 0.389 0.498

Zn 0.944 0.056 0.498

Zn 0.611 0.056 0.498

Zn 0.776 0.890 0.498

Zn 0.776 0.386 0.498

Zn 0.614 0.890 0.498

Zn 0.614 0.224 0.498

Zn 0.110 0.386 0.498

Zn 0.110 0.224 0.498
Zn 0.746 0.789 0.025
Zn 0.746 0.458 0.025
Zn 0.542 0.789 0.025
Zn 0.542 0.254 0.025
Zn 0.211 0.458 0.025
Zn 0.211 0.254 0.025
Zn 0.221 0.943 0.002
Zn 0.221 0.779 0.002
Zn 0.057 0.779 0.002
Zn 0.889 0.277 0.001
Zn 0.889 0.111 0.001
Zn 0.723 0.111 0.001
Zn 0.723 0.946 0.001
Zn 0.723 0.277 0.001
Zn 0.054 0.277 0.001
O 0.943 0.222 0.879
O 0.778 0.222 0.879
O 0.778 0.057 0.879
O 0.278 0.889 0.879
O 0.111 0.889 0.879
O 0.111 0.722 0.879
O 0.948 0.724 0.877
O 0.276 0.724 0.877
O 0.276 0.052 0.877
O 0.945 0.890 0.876
O 0.945 0.556 0.876
O 0.444 0.890 0.876
O 0.444 0.055 0.876
O 0.110 0.556 0.876
O 0.110 0.055 0.876
O 0.944 0.388 0.876
O 0.944 0.056 0.876
O 0.612 0.056 0.876
O 0.779 0.892 0.875
O 0.779 0.387 0.875
O 0.613 0.892 0.875
O 0.613 0.221 0.875
O 0.108 0.387 0.875
O 0.108 0.221 0.875
O 0.783 0.727 0.872
O 0.783 0.556 0.872
O 0.444 0.727 0.872
O 0.444 0.217 0.872
O 0.273 0.556 0.872
O 0.273 0.217 0.872
O 0.222 0.943 0.379
O 0.222 0.778 0.379
O 0.057 0.778 0.379
O 0.889 0.278 0.379
O 0.889 0.111 0.379
O 0.722 0.111 0.379

O 0.724 0.948 0.377
O 0.724 0.276 0.377
O 0.052 0.276 0.377
O 0.890 0.945 0.376
O 0.890 0.444 0.376
O 0.556 0.945 0.376
O 0.556 0.110 0.376
O 0.055 0.444 0.376
O 0.055 0.110 0.376
O 0.388 0.944 0.376
O 0.056 0.944 0.376
O 0.056 0.612 0.376
O 0.892 0.779 0.375
O 0.892 0.613 0.375
O 0.387 0.779 0.375
O 0.387 0.108 0.375
O 0.221 0.613 0.375
O 0.221 0.108 0.375
O 0.727 0.783 0.372
O 0.727 0.444 0.372
O 0.556 0.783 0.372
O 0.556 0.273 0.372
O 0.217 0.444 0.372
O 0.217 0.273 0.372

Str 95 (WZ-ZnO-NP-9)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.44 eV

E_{rel} : 0.21 eV/ZnO

Pore_{max} : 0.52 nm

V_{pore} : 16 %

D_{pore} : 1

cell parameters

13.109 13.109 5.345 90.00 90.00 120.00

fractional coordinates

Zn 0.587 0.671 0.998

Zn 0.329 0.915 0.998

Zn 0.586 0.915 0.998

Zn 0.329 0.413 0.998

Zn 0.085 0.671 0.998

Zn 0.085 0.414 0.998

Zn 0.333 0.667 0.996

Zn 0.180 0.820 0.528

Zn 0.639 0.820 0.528

Zn 0.180 0.361 0.528

Zn 0.417 0.583 0.501

Zn 0.417 0.834 0.501

Zn 0.166 0.583 0.501

Zn 0.414 0.085 0.498

Zn 0.413 0.329 0.498

Zn 0.915 0.586 0.498

Zn 0.671 0.587 0.498

Zn 0.671 0.085 0.498

Zn 0.915 0.329 0.498
Zn 0.667 0.333 0.496
Zn 0.361 0.180 0.028
Zn 0.820 0.639 0.028
Zn 0.820 0.180 0.028
Zn 0.583 0.417 0.001
Zn 0.583 0.166 0.001
Zn 0.834 0.417 0.001
O 0.417 0.583 0.876
O 0.165 0.583 0.876
O 0.417 0.835 0.876
O 0.667 0.333 0.876
O 0.167 0.833 0.875
O 0.666 0.833 0.875
O 0.167 0.334 0.875
O 0.917 0.584 0.874
O 0.416 0.083 0.874
O 0.416 0.334 0.874
O 0.666 0.584 0.874
O 0.666 0.083 0.874
O 0.917 0.334 0.874
O 0.835 0.417 0.376
O 0.583 0.417 0.376
O 0.583 0.165 0.376
O 0.333 0.667 0.376
O 0.334 0.167 0.375
O 0.833 0.666 0.375
O 0.833 0.167 0.375
O 0.334 0.917 0.374
O 0.083 0.666 0.374
O 0.584 0.666 0.374
O 0.584 0.917 0.374
O 0.334 0.416 0.374
O 0.083 0.416 0.374

Str 96 (WZ-ZnO-NP-10)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.48 eV

E_{rel} : 0.25 eV/ZnO

Pore_{max} : 0.57 nm

V_{pore} : 20 %

D_{pore} : 1

cell parameters

13.172 26.428 5.356 90.00 90.01 119.92

fractional coordinates

Zn 0.181 0.690 0.882
Zn 0.928 0.690 0.881
Zn 0.923 0.411 0.879
Zn 0.633 0.915 0.879
Zn 0.176 0.914 0.878
Zn 0.183 0.193 0.869
Zn 0.187 0.535 0.866
Zn 0.165 0.799 0.853

Zn 0.907 0.292 0.852
Zn 0.912 0.802 0.852
Zn 0.415 0.798 0.852
Zn 0.664 0.674 0.851
Zn 0.412 0.923 0.851
Zn 0.659 0.296 0.851
Zn 0.415 0.674 0.851
Zn 0.159 0.298 0.851
Zn 0.668 0.800 0.851
Zn 0.908 0.167 0.849
Zn 0.164 0.419 0.849
Zn 0.664 0.046 0.849
Zn 0.407 0.047 0.849
Zn 0.422 0.304 0.848
Zn 0.658 0.169 0.847
Zn 0.410 0.170 0.847
Zn 0.426 0.547 0.847
Zn 0.563 0.321 0.382
Zn 0.566 0.600 0.380
Zn 0.810 0.095 0.379
Zn 0.359 0.096 0.378
Zn 0.815 0.824 0.378
Zn 0.304 0.316 0.375
Zn 0.302 0.476 0.367
Zn 0.578 0.717 0.354
Zn 0.582 0.212 0.353
Zn 0.831 0.712 0.353
Zn 0.827 0.339 0.353
Zn 0.575 0.086 0.352
Zn 0.826 0.213 0.352
Zn 0.074 0.338 0.351
Zn 0.322 0.208 0.351
Zn 0.071 0.209 0.350
Zn 0.584 0.842 0.350
Zn 0.328 0.715 0.349
Zn 0.324 0.593 0.349
Zn 0.580 0.962 0.349
Zn 0.323 0.962 0.349
Zn 0.080 0.840 0.347
Zn 0.075 0.710 0.347
Zn 0.064 0.464 0.347
Zn 0.329 0.839 0.345
O 0.581 0.717 0.728
O 0.579 0.212 0.727
O 0.580 0.337 0.727
O 0.072 0.337 0.727
O 0.825 0.211 0.727
O 0.575 0.086 0.726
O 0.826 0.335 0.726
O 0.831 0.717 0.726
O 0.584 0.594 0.725
O 0.824 0.088 0.725

O 0.333 0.090 0.725
O 0.332 0.715 0.725
O 0.330 0.839 0.725
O 0.580 0.840 0.724
O 0.078 0.838 0.724
O 0.828 0.839 0.724
O 0.328 0.964 0.724
O 0.079 0.714 0.724
O 0.577 0.963 0.724
O 0.073 0.213 0.724
O 0.317 0.330 0.723
O 0.333 0.214 0.721
O 0.334 0.592 0.720
O 0.072 0.462 0.719
O 0.317 0.471 0.717
O 0.908 0.295 0.228
O 0.168 0.677 0.227
O 0.665 0.676 0.227
O 0.415 0.799 0.226
O 0.661 0.294 0.226
O 0.162 0.797 0.226
O 0.414 0.674 0.226
O 0.659 0.169 0.226
O 0.412 0.922 0.226
O 0.915 0.675 0.226
O 0.660 0.922 0.225
O 0.162 0.920 0.225
O 0.663 0.799 0.225
O 0.913 0.797 0.225
O 0.154 0.295 0.225
O 0.906 0.418 0.225
O 0.907 0.170 0.224
O 0.409 0.045 0.224
O 0.414 0.172 0.224
O 0.659 0.045 0.224
O 0.413 0.297 0.221
O 0.155 0.419 0.221
O 0.417 0.550 0.219
O 0.167 0.178 0.217
O 0.172 0.540 0.215

Str 97 (WZ-ZnO-NP-11)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.37 eV

E_{rel} : 0.16 eV/ZnO

Pore_{max} : 1.12 nm

V_{pore} : 22 %

D_{pore} : 1

cell parameters

26.269 26.317 5.335 90.01 90.00 119.94

fractional coordinates

Zn 0.088 0.313 0.882

Zn 0.215 0.313 0.882

Zn 0.087 0.788 0.881
Zn 0.691 0.788 0.881
Zn 0.464 0.938 0.880
Zn 0.464 0.663 0.879
Zn 0.189 0.663 0.879
Zn 0.215 0.914 0.877
Zn 0.688 0.914 0.877
Zn 0.078 0.670 0.853
Zn 0.581 0.670 0.852
Zn 0.955 0.673 0.852
Zn 0.707 0.673 0.852
Zn 0.330 0.296 0.852
Zn 0.955 0.296 0.852
Zn 0.208 0.795 0.852
Zn 0.576 0.795 0.852
Zn 0.079 0.545 0.851
Zn 0.455 0.545 0.851
Zn 0.333 0.423 0.851
Zn 0.207 0.425 0.851
Zn 0.080 0.423 0.851
Zn 0.329 0.048 0.851
Zn 0.333 0.921 0.851
Zn 0.708 0.048 0.851
Zn 0.578 0.921 0.851
Zn 0.583 0.049 0.850
Zn 0.456 0.049 0.850
Zn 0.330 0.548 0.850
Zn 0.207 0.548 0.850
Zn 0.706 0.422 0.850
Zn 0.581 0.297 0.850
Zn 0.706 0.297 0.850
Zn 0.581 0.422 0.850
Zn 0.581 0.172 0.849
Zn 0.830 0.422 0.849
Zn 0.456 0.422 0.849
Zn 0.955 0.422 0.849
Zn 0.955 0.546 0.849
Zn 0.581 0.546 0.849
Zn 0.326 0.170 0.849
Zn 0.833 0.677 0.849
Zn 0.834 0.170 0.848
Zn 0.831 0.548 0.848
Zn 0.706 0.548 0.848
Zn 0.831 0.296 0.848
Zn 0.455 0.172 0.848
Zn 0.455 0.296 0.848
Zn 0.707 0.172 0.848
Zn 0.305 0.097 0.383
Zn 0.781 0.097 0.383
Zn 0.305 0.223 0.383
Zn 0.907 0.223 0.383
Zn 0.907 0.697 0.382

Zn 0.780 0.697 0.382
Zn 0.280 0.571 0.377
Zn 0.560 0.848 0.372
Zn 0.278 0.848 0.372
Zn 0.788 0.586 0.352
Zn 0.288 0.966 0.352
Zn 0.668 0.966 0.352
Zn 0.288 0.337 0.352
Zn 0.039 0.337 0.352
Zn 0.417 0.215 0.352
Zn 0.788 0.215 0.352
Zn 0.416 0.341 0.352
Zn 0.914 0.586 0.352
Zn 0.914 0.341 0.352
Zn 0.662 0.586 0.352
Zn 0.416 0.089 0.351
Zn 0.662 0.089 0.351
Zn 0.039 0.715 0.351
Zn 0.665 0.715 0.351
Zn 0.789 0.463 0.351
Zn 0.664 0.463 0.351
Zn 0.664 0.339 0.350
Zn 0.789 0.339 0.350
Zn 0.540 0.339 0.350
Zn 0.539 0.214 0.350
Zn 0.664 0.214 0.350
Zn 0.539 0.463 0.350
Zn 0.913 0.464 0.350
Zn 0.414 0.590 0.350
Zn 0.165 0.590 0.349
Zn 0.537 0.962 0.349
Zn 0.414 0.962 0.349
Zn 0.539 0.088 0.349
Zn 0.289 0.460 0.349
Zn 0.161 0.460 0.349
Zn 0.158 0.841 0.348
Zn 0.162 0.334 0.348
Zn 0.673 0.841 0.348
Zn 0.415 0.464 0.348
Zn 0.039 0.464 0.348
Zn 0.040 0.589 0.348
Zn 0.538 0.589 0.348
Zn 0.538 0.713 0.348
Zn 0.165 0.713 0.348
O 0.291 0.216 0.729
O 0.291 0.090 0.729
O 0.788 0.090 0.729
O 0.914 0.216 0.729
O 0.914 0.712 0.729
O 0.787 0.712 0.729
O 0.664 0.339 0.728
O 0.789 0.464 0.728

O 0.789 0.339 0.728
O 0.664 0.464 0.728
O 0.664 0.214 0.728
O 0.539 0.339 0.728
O 0.539 0.214 0.728
O 0.914 0.588 0.727
O 0.789 0.589 0.727
O 0.663 0.588 0.727
O 0.914 0.339 0.727
O 0.414 0.339 0.727
O 0.290 0.340 0.727
O 0.039 0.340 0.727
O 0.414 0.214 0.727
O 0.790 0.214 0.727
O 0.539 0.089 0.727
O 0.163 0.463 0.727
O 0.290 0.463 0.727
O 0.414 0.089 0.727
O 0.291 0.965 0.726
O 0.665 0.089 0.726
O 0.539 0.463 0.726
O 0.664 0.965 0.726
O 0.913 0.463 0.726
O 0.038 0.712 0.726
O 0.664 0.712 0.726
O 0.039 0.588 0.726
O 0.538 0.588 0.726
O 0.414 0.587 0.726
O 0.163 0.587 0.726
O 0.540 0.713 0.725
O 0.162 0.713 0.725
O 0.287 0.585 0.725
O 0.415 0.463 0.725
O 0.164 0.339 0.725
O 0.038 0.463 0.725
O 0.540 0.965 0.725
O 0.415 0.965 0.725
O 0.162 0.838 0.723
O 0.665 0.838 0.723
O 0.286 0.842 0.720
O 0.545 0.842 0.720
O 0.081 0.299 0.229
O 0.208 0.299 0.229
O 0.706 0.422 0.228
O 0.706 0.297 0.228
O 0.581 0.297 0.228
O 0.079 0.671 0.228
O 0.581 0.671 0.227
O 0.581 0.172 0.227
O 0.206 0.422 0.227
O 0.457 0.671 0.227
O 0.203 0.671 0.227

O 0.581 0.422 0.227
O 0.956 0.299 0.227
O 0.078 0.795 0.227
O 0.332 0.299 0.227
O 0.830 0.422 0.227
O 0.706 0.795 0.227
O 0.831 0.547 0.227
O 0.705 0.547 0.227
O 0.079 0.421 0.227
O 0.704 0.670 0.227
O 0.332 0.421 0.227
O 0.955 0.670 0.227
O 0.081 0.546 0.227
O 0.455 0.546 0.227
O 0.456 0.924 0.226
O 0.831 0.298 0.226
O 0.456 0.172 0.226
O 0.705 0.172 0.226
O 0.456 0.047 0.226
O 0.332 0.048 0.226
O 0.706 0.048 0.226
O 0.456 0.298 0.226
O 0.580 0.047 0.226
O 0.956 0.546 0.226
O 0.331 0.545 0.226
O 0.204 0.545 0.226
O 0.580 0.546 0.226
O 0.457 0.423 0.226
O 0.955 0.423 0.225
O 0.208 0.921 0.225
O 0.702 0.920 0.225
O 0.830 0.671 0.225
O 0.331 0.924 0.225
O 0.582 0.924 0.225
O 0.331 0.173 0.225
O 0.831 0.173 0.225
O 0.583 0.796 0.224
O 0.202 0.796 0.224

Str 98 (WZ-ZnO-NP-12)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.33 eV

E_{rel} : 0.15 eV/ZnO

Pore_{max} : 1.12 nm

V_{pore} : 23 %

D_{pore} : 1

cell parameters

22.980 22.980 5.327 90.00 90.00 120.00

fractional coordinates

Zn 0.905 0.238 0.998

Zn 0.620 0.096 0.997

Zn 0.047 0.523 0.997

Zn 0.047 0.096 0.997

Zn 0.904 0.381 0.997
Zn 0.904 0.094 0.997
Zn 0.762 0.239 0.997
Zn 0.762 0.094 0.997
Zn 0.049 0.381 0.997
Zn 0.049 0.239 0.997
Zn 0.759 0.946 0.996
Zn 0.759 0.384 0.996
Zn 0.197 0.384 0.996
Zn 0.819 0.922 0.530
Zn 0.819 0.468 0.530
Zn 0.675 0.922 0.530
Zn 0.675 0.324 0.530
Zn 0.221 0.468 0.530
Zn 0.221 0.324 0.530
Zn 0.811 0.332 0.501
Zn 0.811 0.050 0.501
Zn 0.093 0.332 0.501
Zn 0.954 0.476 0.501
Zn 0.954 0.049 0.501
Zn 0.666 0.189 0.501
Zn 0.666 0.049 0.501
Zn 0.094 0.476 0.501
Zn 0.094 0.189 0.501
Zn 0.951 0.903 0.500
Zn 0.951 0.620 0.500
Zn 0.523 0.903 0.500
Zn 0.523 0.192 0.500
Zn 0.240 0.620 0.500
Zn 0.240 0.192 0.500
Zn 0.952 0.333 0.500
Zn 0.952 0.191 0.500
Zn 0.810 0.191 0.500
Zn 0.238 0.905 0.498
Zn 0.523 0.047 0.497
Zn 0.096 0.620 0.497
Zn 0.096 0.047 0.497
Zn 0.381 0.904 0.497
Zn 0.381 0.049 0.497
Zn 0.239 0.762 0.497
Zn 0.239 0.049 0.497
Zn 0.094 0.904 0.497
Zn 0.094 0.762 0.497
Zn 0.946 0.759 0.496
Zn 0.384 0.759 0.496
Zn 0.384 0.197 0.496
Zn 0.922 0.819 0.030
Zn 0.922 0.675 0.030
Zn 0.468 0.819 0.030
Zn 0.468 0.221 0.030
Zn 0.324 0.675 0.030
Zn 0.324 0.221 0.030

Zn 0.332 0.811 0.001
Zn 0.332 0.093 0.001
Zn 0.050 0.811 0.001
Zn 0.476 0.954 0.001
Zn 0.476 0.094 0.001
Zn 0.189 0.666 0.001
Zn 0.189 0.094 0.001
Zn 0.049 0.954 0.001
Zn 0.049 0.666 0.001
Zn 0.903 0.951 0.000
Zn 0.903 0.523 0.000
Zn 0.620 0.951 0.000
Zn 0.620 0.240 0.000
Zn 0.192 0.523 0.000
Zn 0.192 0.240 0.000
Zn 0.333 0.952 0.000
Zn 0.191 0.952 0.000
Zn 0.191 0.810 0.000
O 0.953 0.334 0.878
O 0.953 0.190 0.878
O 0.809 0.190 0.878
O 0.811 0.906 0.878
O 0.811 0.476 0.878
O 0.666 0.906 0.878
O 0.666 0.332 0.878
O 0.237 0.476 0.878
O 0.237 0.332 0.878
O 0.238 0.905 0.877
O 0.953 0.476 0.876
O 0.953 0.048 0.876
O 0.666 0.190 0.876
O 0.666 0.048 0.876
O 0.095 0.476 0.876
O 0.095 0.190 0.876
O 0.809 0.334 0.876
O 0.809 0.046 0.876
O 0.096 0.334 0.876
O 0.381 0.905 0.876
O 0.381 0.048 0.876
O 0.238 0.762 0.876
O 0.238 0.048 0.876
O 0.095 0.905 0.876
O 0.095 0.762 0.876
O 0.953 0.906 0.876
O 0.953 0.619 0.876
O 0.524 0.906 0.876
O 0.524 0.189 0.876
O 0.237 0.619 0.876
O 0.237 0.189 0.876
O 0.525 0.048 0.874
O 0.095 0.618 0.874
O 0.095 0.048 0.874

O 0.952 0.762 0.874
O 0.381 0.762 0.874
O 0.381 0.191 0.874
O 0.334 0.953 0.378
O 0.190 0.953 0.378
O 0.190 0.809 0.378
O 0.906 0.811 0.378
O 0.906 0.666 0.378
O 0.476 0.811 0.378
O 0.476 0.237 0.378
O 0.332 0.666 0.378
O 0.332 0.237 0.378
O 0.905 0.238 0.377
O 0.476 0.953 0.377
O 0.476 0.095 0.377
O 0.190 0.666 0.377
O 0.190 0.095 0.377
O 0.048 0.953 0.377
O 0.048 0.666 0.377
O 0.334 0.809 0.376
O 0.334 0.096 0.376
O 0.046 0.809 0.376
O 0.905 0.381 0.376
O 0.905 0.095 0.376
O 0.762 0.238 0.376
O 0.762 0.095 0.376
O 0.048 0.381 0.376
O 0.048 0.238 0.376
O 0.906 0.953 0.376
O 0.906 0.524 0.376
O 0.619 0.953 0.376
O 0.619 0.237 0.376
O 0.189 0.524 0.376
O 0.189 0.237 0.376
O 0.618 0.095 0.374
O 0.048 0.525 0.374
O 0.048 0.095 0.374
O 0.762 0.952 0.374
O 0.762 0.381 0.374
O 0.191 0.381 0.374

Str 99 (WZ-ZnO-NP-13)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.36 eV

E_{rel} : 0.21 eV/ZnO

Pore_{max} : 0.94 nm

V_{pore} : 24 %

D_{pore} : 1

cell parameters

19.810 19.810 5.342 90.00 90.00 120.51

fractional coordinates

Zn 0.386 0.109 1.000

Zn 0.058 0.781 1.000

Zn 0.056 0.111 0.999
Zn 0.386 0.944 0.998
Zn 0.223 0.780 0.998
Zn 0.718 0.935 0.998
Zn 0.232 0.448 0.998
Zn 0.058 0.277 0.997
Zn 0.889 0.109 0.997
Zn 0.552 0.104 0.997
Zn 0.063 0.615 0.997
Zn 0.552 0.939 0.996
Zn 0.228 0.614 0.996
Zn 0.723 0.105 0.995
Zn 0.062 0.444 0.995
Zn 0.788 0.909 0.532
Zn 0.258 0.379 0.532
Zn 0.621 0.912 0.531
Zn 0.255 0.545 0.531
Zn 0.456 0.917 0.527
Zn 0.250 0.711 0.527
Zn 0.947 0.056 0.502
Zn 0.111 0.220 0.502
Zn 0.941 0.886 0.502
Zn 0.281 0.225 0.502
Zn 0.275 0.891 0.502
Zn 0.946 0.221 0.500
Zn 0.781 0.058 0.500
Zn 0.109 0.386 0.500
Zn 0.111 0.056 0.499
Zn 0.944 0.386 0.498
Zn 0.780 0.223 0.498
Zn 0.935 0.718 0.498
Zn 0.448 0.232 0.498
Zn 0.277 0.058 0.497
Zn 0.109 0.889 0.497
Zn 0.104 0.552 0.497
Zn 0.615 0.063 0.497
Zn 0.939 0.552 0.496
Zn 0.614 0.228 0.496
Zn 0.105 0.723 0.495
Zn 0.444 0.062 0.495
Zn 0.909 0.788 0.032
Zn 0.379 0.258 0.032
Zn 0.912 0.621 0.032
Zn 0.545 0.255 0.032
Zn 0.917 0.456 0.027
Zn 0.711 0.250 0.027
Zn 0.220 0.111 0.002
Zn 0.056 0.947 0.002
Zn 0.886 0.941 0.002
Zn 0.225 0.281 0.002
Zn 0.891 0.275 0.002
Zn 0.221 0.946 0.000

O 0.779 0.889 0.878
O 0.277 0.388 0.878
O 0.945 0.054 0.877
O 0.113 0.221 0.877
O 0.612 0.893 0.877
O 0.274 0.555 0.877
O 0.275 0.891 0.877
O 0.944 0.889 0.877
O 0.277 0.222 0.877
O 0.946 0.221 0.877
O 0.110 0.056 0.875
O 0.276 0.057 0.875
O 0.110 0.891 0.875
O 0.779 0.052 0.874
O 0.114 0.388 0.874
O 0.947 0.386 0.874
O 0.780 0.219 0.874
O 0.943 0.722 0.874
O 0.445 0.224 0.874
O 0.447 0.899 0.873
O 0.268 0.720 0.873
O 0.442 0.058 0.873
O 0.109 0.724 0.873
O 0.110 0.554 0.872
O 0.613 0.057 0.872
O 0.947 0.556 0.872
O 0.611 0.220 0.872
O 0.889 0.779 0.378
O 0.388 0.277 0.378
O 0.221 0.112 0.377
O 0.054 0.945 0.377
O 0.893 0.612 0.377
O 0.555 0.274 0.377
O 0.891 0.275 0.377
O 0.889 0.944 0.377
O 0.222 0.277 0.377
O 0.221 0.946 0.377
O 0.056 0.110 0.375
O 0.057 0.276 0.375
O 0.891 0.110 0.375
O 0.388 0.114 0.374
O 0.052 0.779 0.374
O 0.386 0.947 0.374
O 0.219 0.780 0.374
O 0.722 0.943 0.374
O 0.224 0.445 0.374
O 0.899 0.447 0.373
O 0.720 0.268 0.373
O 0.058 0.442 0.373
O 0.724 0.109 0.373
O 0.554 0.110 0.372
O 0.057 0.613 0.372

O 0.556 0.947 0.372
O 0.220 0.611 0.372

Str 100 (WZ-ZnO-NP-14)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.58 eV

E_{rel} : 0.29 eV/ZnO

Pore_{max}: 0.57 nm

V_{pore} : 24 %

D_{pore} : 1

cell parameters

13.242 13.242 5.374 90.00 90.00 119.71

fractional coordinates

Zn 0.827 0.409 1.000

Zn 0.591 0.173 1.000

Zn 0.336 0.664 0.999

Zn 0.598 0.919 0.997

Zn 0.081 0.402 0.997

Zn 0.184 0.364 0.530

Zn 0.636 0.816 0.530

Zn 0.939 0.382 0.518

Zn 0.618 0.061 0.518

Zn 0.419 0.581 0.505

Zn 0.669 0.586 0.502

Zn 0.414 0.331 0.502

Zn 0.409 0.827 0.500

Zn 0.173 0.591 0.500

Zn 0.664 0.336 0.499

Zn 0.402 0.081 0.497

Zn 0.919 0.598 0.497

Zn 0.364 0.184 0.030

Zn 0.816 0.636 0.030

Zn 0.382 0.939 0.018

Zn 0.061 0.618 0.018

Zn 0.581 0.419 0.005

Zn 0.586 0.669 0.002

Zn 0.331 0.414 0.002

O 0.419 0.581 0.878

O 0.665 0.582 0.876

O 0.418 0.335 0.876

O 0.664 0.336 0.875

O 0.172 0.336 0.875

O 0.664 0.828 0.875

O 0.418 0.828 0.870

O 0.172 0.582 0.870

O 0.415 0.086 0.869

O 0.914 0.585 0.869

O 0.928 0.357 0.866

O 0.643 0.072 0.866

O 0.581 0.419 0.378

O 0.335 0.418 0.376

O 0.582 0.665 0.376

O 0.336 0.664 0.375

O 0.828 0.664 0.375
O 0.336 0.172 0.375
O 0.828 0.418 0.370
O 0.582 0.172 0.370
O 0.086 0.415 0.369
O 0.585 0.914 0.369
O 0.357 0.928 0.366
O 0.072 0.643 0.366

Str 101 (WZ-ZnO-NP-15)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.72 eV

E_{rel} : 0.28 eV/ZnO

Pore_{max}: 0.56 nm

V_{pore}: 25 %

D_{pore}: 1

cell parameters

11.516 11.520 5.365 89.99 90.03 119.99

fractional coordinates

Zn 0.312 0.000 0.565

Zn 0.937 0.376 0.564

Zn 0.561 0.625 0.564

Zn 0.430 0.326 0.540

Zn 0.611 0.168 0.540

Zn 0.104 0.674 0.540

Zn 0.263 0.494 0.540

Zn 0.769 0.506 0.540

Zn 0.443 0.833 0.540

Zn 0.561 1.000 0.064

Zn 0.312 0.375 0.064

Zn 0.936 0.625 0.064

Zn 0.430 0.167 0.041

Zn 0.263 0.833 0.040

Zn 0.610 0.506 0.040

Zn 0.104 0.494 0.040

Zn 0.769 0.326 0.040

Zn 0.443 0.674 0.040

O 0.440 0.334 0.914

O 0.106 0.666 0.914

O 0.602 0.169 0.914

O 0.270 0.504 0.913

O 0.767 0.496 0.913

O 0.433 0.831 0.913

O 0.284 0.000 0.912

O 0.936 0.348 0.912

O 0.588 0.652 0.912

O 0.440 0.169 0.414

O 0.271 0.831 0.414

O 0.602 0.496 0.413

O 0.106 0.504 0.413

O 0.767 0.334 0.413

O 0.433 0.666 0.413

O 0.589 0.000 0.412

O 0.284 0.348 0.412
O 0.936 0.652 0.411

Str 102 (WZ-ZnO-NP-16)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.39 eV

E_{rel} : 0.20 eV/ZnO

Pore_{max}: 1.12 nm

V_{pore} : 25 %

D_{pore} : 1

cell parameters

23.039 23.062 5.342 89.99 90.00 119.97

fractional coordinates

Zn 0.100 0.357 0.882

Zn 0.244 0.357 0.882

Zn 0.098 0.759 0.881

Zn 0.648 0.758 0.881

Zn 0.390 0.614 0.877

Zn 0.212 0.614 0.877

Zn 0.246 0.901 0.874

Zn 0.643 0.901 0.874

Zn 0.236 0.485 0.855

Zn 0.087 0.623 0.853

Zn 0.523 0.622 0.853

Zn 0.089 0.481 0.852

Zn 0.380 0.481 0.852

Zn 0.948 0.337 0.852

Zn 0.947 0.626 0.852

Zn 0.666 0.626 0.851

Zn 0.377 0.337 0.851

Zn 0.235 0.766 0.851

Zn 0.518 0.766 0.851

Zn 0.666 0.055 0.851

Zn 0.377 0.055 0.851

Zn 0.521 0.055 0.850

Zn 0.380 0.910 0.849

Zn 0.518 0.910 0.849

Zn 0.948 0.482 0.849

Zn 0.521 0.482 0.849

Zn 0.809 0.195 0.848

Zn 0.664 0.340 0.848

Zn 0.373 0.195 0.848

Zn 0.809 0.630 0.848

Zn 0.664 0.197 0.847

Zn 0.807 0.339 0.847

Zn 0.521 0.197 0.847

Zn 0.520 0.339 0.847

Zn 0.664 0.483 0.847

Zn 0.806 0.483 0.847

Zn 0.750 0.112 0.383

Zn 0.350 0.112 0.383

Zn 0.893 0.254 0.382

Zn 0.349 0.254 0.382

Zn 0.749 0.654 0.382
Zn 0.893 0.654 0.381
Zn 0.315 0.828 0.369
Zn 0.501 0.828 0.369
Zn 0.476 0.102 0.352
Zn 0.614 0.102 0.352
Zn 0.757 0.247 0.352
Zn 0.477 0.247 0.352
Zn 0.473 0.958 0.352
Zn 0.329 0.962 0.352
Zn 0.621 0.962 0.352
Zn 0.757 0.526 0.352
Zn 0.902 0.389 0.351
Zn 0.902 0.528 0.351
Zn 0.475 0.389 0.351
Zn 0.614 0.528 0.351
Zn 0.043 0.674 0.351
Zn 0.619 0.674 0.351
Zn 0.616 0.245 0.350
Zn 0.328 0.385 0.350
Zn 0.045 0.385 0.350
Zn 0.616 0.387 0.350
Zn 0.759 0.387 0.350
Zn 0.184 0.381 0.348
Zn 0.179 0.819 0.348
Zn 0.628 0.819 0.348
Zn 0.045 0.530 0.347
Zn 0.186 0.672 0.347
Zn 0.474 0.672 0.347
Zn 0.472 0.530 0.347
Zn 0.188 0.530 0.345
Zn 0.330 0.530 0.345
O 0.758 0.103 0.729
O 0.333 0.103 0.729
O 0.901 0.246 0.728
O 0.333 0.246 0.728
O 0.616 0.102 0.727
O 0.474 0.102 0.727
O 0.757 0.670 0.727
O 0.901 0.670 0.727
O 0.616 0.245 0.727
O 0.474 0.960 0.727
O 0.759 0.387 0.727
O 0.616 0.387 0.727
O 0.902 0.387 0.727
O 0.759 0.245 0.727
O 0.473 0.245 0.727
O 0.473 0.387 0.727
O 0.902 0.529 0.727
O 0.616 0.529 0.727
O 0.759 0.530 0.726
O 0.042 0.672 0.726

O 0.331 0.386 0.726
O 0.617 0.671 0.726
O 0.044 0.386 0.726
O 0.617 0.961 0.726
O 0.332 0.961 0.726
O 0.044 0.529 0.725
O 0.187 0.387 0.725
O 0.473 0.529 0.725
O 0.186 0.528 0.724
O 0.183 0.672 0.724
O 0.476 0.672 0.724
O 0.330 0.528 0.724
O 0.184 0.816 0.722
O 0.620 0.815 0.721
O 0.324 0.821 0.718
O 0.484 0.821 0.718
O 0.236 0.341 0.228
O 0.092 0.341 0.228
O 0.234 0.481 0.228
O 0.089 0.624 0.227
O 0.523 0.624 0.227
O 0.088 0.766 0.227
O 0.521 0.053 0.227
O 0.665 0.766 0.227
O 0.091 0.481 0.227
O 0.664 0.340 0.227
O 0.378 0.481 0.227
O 0.663 0.197 0.226
O 0.663 0.056 0.226
O 0.521 0.197 0.226
O 0.380 0.056 0.226
O 0.949 0.341 0.226
O 0.807 0.340 0.226
O 0.379 0.341 0.226
O 0.521 0.340 0.226
O 0.663 0.482 0.226
O 0.948 0.623 0.226
O 0.663 0.623 0.226
O 0.807 0.482 0.226
O 0.950 0.482 0.225
O 0.521 0.482 0.225
O 0.382 0.622 0.225
O 0.227 0.622 0.225
O 0.807 0.198 0.224
O 0.379 0.198 0.224
O 0.522 0.913 0.224
O 0.379 0.913 0.224
O 0.806 0.624 0.224
O 0.239 0.909 0.223
O 0.658 0.909 0.223
O 0.229 0.767 0.223
O 0.525 0.767 0.222

Str 103 (WZ-ZnO-NP-17)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.53 eV

E_{rel} : 0.27 eV/ZnO

Pore_{max}: 0.83 nm

V_{pore} : 29 %

D_{pore} : 1

cell parameters

16.447 16.447 5.358 90.00 90.00 120.78

fractional coordinates

Zn 0.862 0.929 0.999

Zn 0.070 0.138 0.999

Zn 0.867 0.331 0.996

Zn 0.669 0.133 0.996

Zn 0.661 0.922 0.995

Zn 0.078 0.339 0.995

Zn 0.868 0.132 0.992

Zn 0.743 0.887 0.530

Zn 0.113 0.257 0.530

Zn 0.542 0.890 0.528

Zn 0.110 0.458 0.528

Zn 0.747 0.253 0.527

Zn 0.935 0.065 0.501

Zn 0.935 0.265 0.501

Zn 0.735 0.065 0.501

Zn 0.928 0.467 0.500

Zn 0.533 0.072 0.500

Zn 0.929 0.862 0.499

Zn 0.138 0.070 0.499

Zn 0.331 0.867 0.496

Zn 0.133 0.669 0.496

Zn 0.922 0.661 0.495

Zn 0.339 0.078 0.495

Zn 0.132 0.868 0.492

Zn 0.887 0.743 0.030

Zn 0.257 0.113 0.030

Zn 0.890 0.542 0.028

Zn 0.458 0.110 0.028

Zn 0.253 0.747 0.027

Zn 0.065 0.935 0.001

Zn 0.265 0.935 0.001

Zn 0.065 0.735 0.001

Zn 0.467 0.928 0.000

Zn 0.072 0.533 0.000

O 0.733 0.865 0.876

O 0.135 0.267 0.876

O 0.935 0.065 0.875

O 0.938 0.267 0.874

O 0.733 0.062 0.874

O 0.737 0.263 0.874

O 0.931 0.866 0.873

O 0.134 0.069 0.873

O 0.531 0.866 0.873
O 0.134 0.469 0.873
O 0.935 0.466 0.873
O 0.534 0.065 0.873
O 0.132 0.868 0.872
O 0.333 0.871 0.872
O 0.129 0.667 0.872
O 0.928 0.664 0.871
O 0.336 0.072 0.871
O 0.865 0.733 0.376
O 0.267 0.135 0.376
O 0.065 0.935 0.375
O 0.267 0.938 0.374
O 0.062 0.733 0.374
O 0.263 0.737 0.374
O 0.866 0.931 0.373
O 0.069 0.134 0.373
O 0.866 0.531 0.373
O 0.469 0.134 0.373
O 0.466 0.935 0.373
O 0.065 0.534 0.373
O 0.868 0.132 0.372
O 0.871 0.333 0.372
O 0.667 0.129 0.372
O 0.664 0.928 0.371
O 0.072 0.336 0.371

Str 104 (WZ-ZnO-NP-18)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.46 eV

E_{rel} : 0.23 eV/ZnO

Pore_{max} : 1.12 nm

V_{pore} : 31 %

D_{pore} : 1

cell parameters

19.707 19.707 5.351 90.00 90.00 120.00

fractional coordinates

Zn 0.557 0.943 0.999

Zn 0.557 0.614 0.999

Zn 0.386 0.943 0.999

Zn 0.386 0.443 0.999

Zn 0.057 0.614 0.999

Zn 0.057 0.443 0.999

Zn 0.721 0.442 0.999

Zn 0.721 0.279 0.999

Zn 0.558 0.279 0.999

Zn 0.562 0.781 0.996

Zn 0.219 0.781 0.996

Zn 0.219 0.438 0.996

Zn 0.389 0.778 0.991

Zn 0.389 0.611 0.991

Zn 0.222 0.611 0.991

Zn 0.591 0.879 0.531

Zn 0.591 0.712 0.531
Zn 0.288 0.879 0.531
Zn 0.288 0.409 0.531
Zn 0.121 0.712 0.531
Zn 0.121 0.409 0.531
Zn 0.445 0.890 0.501
Zn 0.445 0.555 0.501
Zn 0.110 0.555 0.501
Zn 0.943 0.557 0.499
Zn 0.943 0.386 0.499
Zn 0.614 0.557 0.499
Zn 0.614 0.057 0.499
Zn 0.443 0.386 0.499
Zn 0.443 0.057 0.499
Zn 0.442 0.721 0.499
Zn 0.279 0.721 0.499
Zn 0.279 0.558 0.499
Zn 0.781 0.562 0.496
Zn 0.781 0.219 0.496
Zn 0.438 0.219 0.496
Zn 0.778 0.389 0.491
Zn 0.611 0.389 0.491
Zn 0.611 0.222 0.491
Zn 0.879 0.591 0.031
Zn 0.879 0.288 0.031
Zn 0.712 0.591 0.031
Zn 0.712 0.121 0.031
Zn 0.409 0.288 0.031
Zn 0.409 0.121 0.031
Zn 0.890 0.445 0.001
Zn 0.555 0.445 0.001
Zn 0.555 0.110 0.001
O 0.609 0.888 0.877
O 0.609 0.721 0.877
O 0.279 0.888 0.877
O 0.279 0.391 0.877
O 0.112 0.721 0.877
O 0.112 0.391 0.877
O 0.445 0.890 0.875
O 0.445 0.555 0.875
O 0.110 0.555 0.875
O 0.945 0.556 0.874
O 0.945 0.389 0.874
O 0.611 0.556 0.874
O 0.611 0.055 0.874
O 0.444 0.389 0.874
O 0.444 0.055 0.874
O 0.445 0.723 0.873
O 0.277 0.723 0.873
O 0.277 0.555 0.873
O 0.778 0.556 0.872
O 0.778 0.222 0.872

O 0.444 0.222 0.872
O 0.779 0.389 0.872
O 0.611 0.389 0.872
O 0.611 0.221 0.872
O 0.888 0.609 0.377
O 0.888 0.279 0.377
O 0.721 0.609 0.377
O 0.721 0.112 0.377
O 0.391 0.279 0.377
O 0.391 0.112 0.377
O 0.890 0.445 0.375
O 0.555 0.445 0.375
O 0.555 0.110 0.375
O 0.556 0.945 0.374
O 0.556 0.611 0.374
O 0.389 0.945 0.374
O 0.389 0.444 0.374
O 0.055 0.611 0.374
O 0.055 0.444 0.374
O 0.723 0.445 0.373
O 0.723 0.277 0.373
O 0.555 0.277 0.373
O 0.556 0.778 0.372
O 0.222 0.778 0.372
O 0.222 0.444 0.372
O 0.389 0.779 0.372
O 0.389 0.611 0.372
O 0.221 0.611 0.372

Str 105 (WZ-ZnO-NP-19)

$\Delta E_{\text{gap}}(\text{PBE}_{\text{GW-fit}})$: 0.81 eV

E_{rel} : 0.32 eV/ZnO

Pore_{max} : 0.75 nm

V_{pore} : 33 %

D_{pore} : 1

cell parameters

16.419 16.419 5.373 90.00 90.00 120.00

fractional coordinates

Zn 0.667 0.935 0.998

Zn 0.068 0.333 0.998

Zn 0.065 0.932 0.998

Zn 0.868 0.931 0.996

Zn 0.863 0.132 0.996

Zn 0.069 0.137 0.996

Zn 0.951 0.895 0.526

Zn 0.744 0.049 0.526

Zn 0.105 0.256 0.526

Zn 0.940 0.452 0.524

Zn 0.548 0.688 0.524

Zn 0.312 0.060 0.524

Zn 0.933 0.067 0.502

Zn 0.923 0.264 0.501

Zn 0.736 0.859 0.501
Zn 0.141 0.077 0.501
Zn 0.533 0.868 0.498
Zn 0.135 0.467 0.498
Zn 0.132 0.865 0.498
Zn 0.337 0.869 0.496
Zn 0.332 0.663 0.496
Zn 0.131 0.668 0.496
Zn 0.456 0.905 0.026
Zn 0.249 0.544 0.026
Zn 0.095 0.751 0.026
Zn 0.888 0.348 0.024
Zn 0.652 0.740 0.024
Zn 0.260 0.112 0.024
Zn 0.267 0.733 0.003
Zn 0.464 0.723 0.001
Zn 0.277 0.941 0.001
Zn 0.059 0.536 0.001
O 0.933 0.067 0.875
O 0.930 0.266 0.873
O 0.734 0.864 0.873
O 0.136 0.070 0.873
O 0.534 0.861 0.872
O 0.139 0.872 0.872
O 0.128 0.466 0.872
O 0.334 0.866 0.872
O 0.332 0.666 0.872
O 0.134 0.668 0.872
O 0.938 0.872 0.871
O 0.734 0.062 0.871
O 0.128 0.266 0.871
O 0.931 0.467 0.869
O 0.533 0.664 0.869
O 0.336 0.069 0.869
O 0.267 0.733 0.375
O 0.466 0.730 0.373
O 0.270 0.936 0.373
O 0.064 0.534 0.373
O 0.666 0.928 0.372
O 0.072 0.939 0.372
O 0.061 0.334 0.372
O 0.868 0.934 0.372
O 0.866 0.132 0.372
O 0.066 0.134 0.372
O 0.466 0.928 0.371
O 0.262 0.534 0.371
O 0.072 0.738 0.371
O 0.864 0.333 0.369
O 0.667 0.731 0.369
O 0.269 0.136 0.369