|  |  |  |
| --- | --- | --- |
| Name |  | Runtime environment |
| Operating system |  | Linux (64 bit) |
| Compiling environment |  | Bash shell (4.2.46); Python (3.8.3); Perl (5.16.3) |

|  |  |  |
| --- | --- | --- |
| Name |  | Python Library |
| ase |  | 3.22.1 |
| numpy |  | 1.23.2 |
| pymatgen |  | 2023.3.23 |

|  |  |  |
| --- | --- | --- |
| Name |  | Perl modules |
| Getopt::Long |  | 2.4 |

The above content is to ensure the stable operation of the software requirements.