|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wmw (%) | fc (MPa) | Ec (GPa) |
| 1 | Zakaria & Cabrera (1996)[81] | 36.4 | 0.55 | 0.40 | 0 | 0.5 | 42.5 | — |
| 2 |  | 36.4 | 0.55 | 0.40 | 100 | 4.6 | 40.8 | — |
| 3 | Mansur et al. (1999) [69] | 49.3 | 0.33 | 0.41 | 100 | 6.1 | — | 30.4 |
| 4 |  | 49.3 | 0.44 | 0.47 | 100 | 6.1 | — | 28.4 |
| 5 |  | 49.3 | 0.44 | 0.47 | 100 | 6.1 | — | 27.7 |
| 6 |  | 49.3 | 0.44 | 0.47 | 100 | 6.1 | — | 28.4 |
| 7 |  | 49.3 | 0.56 | 0.50 | 100 | 6.1 | — | 25.8 |
| 8 |  | 49.3 | 0.56 | 0.50 | 100 | 6.1 | — | 25.7 |
| 9 |  | 49.3 | 0.56 | 0.50 | 100 | 6.1 | — | 25.0 |
| 10 |  | 49.3 | 0.66 | 0.51 | 100 | 6.1 | — | 23.4 |
| 11 |  | 49.3 | 0.66 | 0.51 | 100 | 6.1 | — | 24.4 |
| 12 |  | 49.3 | 0.66 | 0.51 | 100 | 6.1 | — | 25.2 |
| 13 | Lu & Ma (2003) [57] | 36.4 | 0.56 | 0.32 | 0 | 0.5 | 31.1 | — |
| 14 |  | 36.4 | 0.56 | 0.32 | 0 | 0.5 | 30.2 | — |
| 15 |  | 36.4 | 0.56 | 0.32 | 0 | 0.5 | 28.1 | — |
| 16 |  | 36.4 | 0.56 | 0.33 | 7 | 1.1 | 22.9 | — |
| 17 |  | 36.4 | 0.56 | 0.33 | 7 | 1.1 | 22.4 | — |
| 18 |  | 36.4 | 0.56 | 0.33 | 7 | 1.1 | 23.5 | — |
| 19 |  | 36.4 | 0.56 | 0.34 | 15 | 1.7 | 21.7 | — |
| 20 |  | 36.4 | 0.56 | 0.34 | 15 | 1.7 | 20.8 | — |
| 21 |  | 36.4 | 0.56 | 0.34 | 15 | 1.7 | 23.3 | — |
| 22 |  | 36.4 | 0.56 | 0.35 | 23 | 2.4 | 19.9 | — |
| 23 |  | 36.4 | 0.56 | 0.35 | 23 | 2.4 | 20.4 | — |
| 24 |  | 36.4 | 0.56 | 0.35 | 23 | 2.4 | 19.2 | — |
| 25 |  | 36.4 | 0.56 | 0.36 | 32 | 3.1 | 22.2 | — |
| 26 |  | 36.4 | 0.56 | 0.36 | 32 | 3.1 | 21.7 | — |
| 27 |  | 36.4 | 0.56 | 0.36 | 32 | 3.1 | 22.4 | — |
| 28 |  | 36.4 | 0.56 | 0.37 | 42 | 3.9 | 21.5 | — |
| 29 |  | 36.4 | 0.56 | 0.37 | 42 | 3.9 | 21.9 | — |
| 30 |  | 36.4 | 0.56 | 0.37 | 42 | 3.9 | 20.8 | — |
| 31 |  | 36.4 | 0.56 | 0.38 | 52 | 4.8 | 23.1 | — |
| 32 |  | 36.4 | 0.56 | 0.38 | 52 | 4.8 | 24.0 | — |
| 33 |  | 36.4 | 0.56 | 0.38 | 52 | 4.8 | 23.8 | — |
| 34 |  | 36.4 | 0.55 | 0.39 | 62 | 5.8 | 20.4 | — |
| 35 |  | 36.4 | 0.55 | 0.39 | 62 | 5.8 | 21.7 | — |
| 36 |  | 36.4 | 0.55 | 0.39 | 62 | 5.8 | 16.5 | — |
| 37 |  | 36.4 | 0.56 | 0.40 | 74 | 6.9 | 19.2 | — |
| 38 |  | 36.4 | 0.56 | 0.40 | 74 | 6.9 | 19.6 | — |
| 39 |  | 36.4 | 0.56 | 0.40 | 74 | 6.9 | 19.7 | — |
| 40 |  | 36.4 | 0.56 | 0.42 | 86 | 8.1 | 22.8 | — |
| 41 |  | 36.4 | 0.56 | 0.42 | 86 | 8.1 | 22.4 | — |
| 42 |  | 36.4 | 0.56 | 0.42 | 86 | 8.1 | 22.9 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 43 |  | 36.4 | 0.56 | 0.43 | 100 | 9.5 | 22.8 | — |
| 44 |  | 36.4 | 0.56 | 0.43 | 100 | 9.5 | 23.8 | — |
| 45 |  | 36.4 | 0.56 | 0.43 | 100 | 9.5 | 24.2 | — |
| 46 | Cheng (2005) [56] | 36.4 | 0.6 | 0.31 | 0 | 2.5 | 15.2 | — |
| 47 |  | 36.4 | 0.45 | 0.31 | 33 | 6.5 | 18.6 | — |
| 48 |  | 36.4 | 0.65 | 0.31 | 33 | 6.5 | 15.8 | — |
| 49 |  | 36.4 | 0.85 | 0.31 | 33 | 6.5 | 12.7 | — |
| 50 |  | 36.4 | 0.60 | 0.31 | 44 | 7.9 | 13.3 | — |
| 51 |  | 36.4 | 0.55 | 0.31 | 54 | 9.2 | 14.9 | — |
| 52 | Xing et al. (2006) [55] | 36.4 | 0.40 | 0.23 | 33 | 5.7 | 26.5 | — |
| 53 |  | 36.4 | 0.40 | 0.26 | 54 | 9.5 | 19.7 | — |
| 54 |  | 36.4 | 0.40 | 0.29 | 73 | 13.2 | 17.6 | — |
| 55 |  | 36.4 | 0.50 | 0.26 | 33 | 5.8 | 18.2 | — |
| 56 |  | 36.4 | 0.50 | 0.29 | 54 | 9.5 | 16.6 | — |
| 57 |  | 36.4 | 0.60 | 0.29 | 33 | 5.8 | 13.7 | — |
| 58 | Debieb & Kenai (2008)[12] | 36.4 | 0.61 | 0.39 | 0 | 1.5 | 23.0 | — |
| 59 |  | 36.4 | 0.6 | 0.39 | 30 | 4.0 | 17.0 | — |
| 60 |  | 36.4 | 0.59 | 0.39 | 56 | 6.5 | 16.4 | — |
| 61 |  | 36.4 | 0.58 | 0.39 | 79 | 9.0 | 15.8 | — |
| 62 |  | 36.4 | 0.57 | 0.39 | 100 | 11.5 | 15.4 | — |
| 63 | Cachim (2009) [8] | 36.4 | 0.45 | 0.38 | 0 | 1.2 | 24.4 | 32.9 |
| 64 |  | 36.4 | 0.45 | 0.36 | 12 | 2.8 | 19.6 | 28.5 |
| 65 |  | 36.4 | 0.45 | 0.36 | 13 | 3.2 | 23.5 | 35.6 |
| 66 |  | 36.4 | 0.45 | 0.41 | 30 | 5.0 | 23.2 | 35.9 |
| 67 |  | 36.4 | 0.45 | 0.41 | 31 | 6.1 | 25.8 | 32.4 |
| 68 |  | 36.4 | 0.50 | 0.38 | 0 | 1.2 | 29 | 35.2 |
| 69 |  | 36.4 | 0.50 | 0.36 | 12 | 2.8 | 22.1 | 31.4 |
| 70 |  | 36.4 | 0.50 | 0.36 | 13 | 3.2 | 25.7 | 33.7 |
| 71 |  | 36.4 | 0.50 | 0.41 | 30 | 5.0 | 25.8 | 32.6 |
| 72 |  | 36.4 | 0.50 | 0.40 | 32 | 6.2 | 30.8 | 34.7 |
| 73 | Rashid et al. (2009) [26] | 49.3 | 0.44 | 0.38 | 100 | 15.8 | 27.7 | — |
| 74 |  | 49.3 | 0.40 | 0.37 | 100 | 15.8 | 30.6 | — |
| 75 |  | 49.3 | 0.34 | 0.37 | 100 | 15.8 | 32.0 | — |
| 76 |  | 49.3 | 0.44 | 0.38 | 100 | 15.8 | 31.1 | — |
| 77 |  | 49.3 | 0.40 | 0.37 | 100 | 15.8 | 34.8 | — |
| 78 |  | 49.3 | 0.34 | 0.37 | 100 | 15.8 | 36.8 | — |
| 79 | Liu (2010) [59] | 36.4 | 0.40 | 0.36 | 0 | 6.0 | 26.2 | — |
| 80 |  | 36.4 | 0.40 | 0.36 | 0 | 6.0 | 25.8 | — |
| 81 |  | 36.4 | 0.40 | 0.36 | 0 | 6.0 | 28.3 | — |
| 82 |  | 36.4 | 0.25 | 0.36 | 100 | 17.4 | 17.6 | — |
| 83 |  | 36.4 | 0.25 | 0.36 | 100 | 17.4 | 18.2 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 84 |  | 36.4 | 0.25 | 0.36 | 100 | 17.4 | 18.6 | — |
| 85 |  | 36.4 | 0.35 | 0.33 | 0 | 6.0 | 35.6 | — |
| 86 |  | 36.4 | 0.35 | 0.33 | 0 | 6.0 | 36.0 | — |
| 87 |  | 36.4 | 0.35 | 0.33 | 0 | 6.0 | 37.8 | — |
| 88 |  | 36.4 | 0.20 | 0.35 | 100 | 17.4 | 23.2 | — |
| 89 |  | 36.4 | 0.20 | 0.35 | 100 | 17.4 | 23.9 | — |
| 90 |  | 36.4 | 0.20 | 0.35 | 100 | 17.4 | 23.6 | — |
| 91 | Liu et al. (2011) [65] | 36.4 | 0.49 | 0.34 | 100 | 5.2 | 18.2 | — |
| 92 |  | 36.4 | 0.49 | 0.34 | 100 | 5.2 | 17.6 | — |
| 93 |  | 36.4 | 0.49 | 0.34 | 100 | 5.2 | 17.2 | — |
| 94 |  | 36.4 | 0.45 | 0.34 | 100 | 5.2 | 15.1 | — |
| 95 |  | 36.4 | 0.45 | 0.34 | 100 | 5.2 | 14.5 | — |
| 96 |  | 36.4 | 0.45 | 0.34 | 100 | 5.2 | 13.8 | — |
| 97 |  | 36.4 | 0.40 | 0.32 | 100 | 5.2 | 14.2 | — |
| 98 |  | 36.4 | 0.40 | 0.32 | 100 | 5.2 | 13.2 | — |
| 99 |  | 36.4 | 0.40 | 0.32 | 100 | 5.2 | 12.4 | — |
| 100 |  | 36.4 | 0.38 | 0.30 | 100 | 5.2 | 11.4 | — |
| 101 |  | 36.4 | 0.38 | 0.30 | 100 | 5.2 | 10.4 | — |
| 102 |  | 36.4 | 0.38 | 0.30 | 100 | 5.2 | 9.9 | — |
| 103 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.2 | — |
| 104 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 17.8 | — |
| 105 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 17.2 | — |
| 106 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.4 | — |
| 107 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.6 | — |
| 108 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 19.2 | — |
| 109 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.0 | — |
| 110 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 17.8 | — |
| 111 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.5 | — |
| 112 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.0 | — |
| 113 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 16.9 | — |
| 114 |  | 36.4 | 0.47 | 0.32 | 100 | 5.2 | 18.0 | — |
| 115 | Mohammad et al. (2012) [27] | 36.4 | 0.50 | 0.37 | 0 | 0.3 | 27.3 | — |
| 116 |  | 36.4 | 0.50 | 0.37 | 25 | 3.8 | 25.0 | — |
| 117 |  | 36.4 | 0.50 | 0.37 | 50 | 7.5 | 24.6 | — |
| 118 |  | 36.4 | 0.50 | 0.37 | 75 | 11.6 | 19.9 | — |
| 119 |  | 36.4 | 0.50 | 0.37 | 100 | 16.0 | 18.3 | — |
| 120 | Wang (2013) [51] | 36.4 | 0.60 | 0.37 | 0 | 0.8 | 21.8 | — |
| 121 |  | 36.4 | 0.51 | 0.37 | 27 | 4.0 | 20.2 | — |
| 122 |  | 36.4 | 0.46 | 0.37 | 46 | 6.5 | 21.4 | — |
| 123 |  | 36.4 | 0.42 | 0.37 | 67 | 9.3 | 22.5 | — |
| 124 |  | 36.4 | 0.36 | 0.37 | 100 | 14.1 | 21.3 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 125 | Yu (2013) [52] | 49.3 | 0.34 | 0.35 | 0 | 1.5 | 45.7 | — |
| 126 |  | 49.3 | 0.34 | 0.35 | 33 | 6.0 | 43.1 | — |
| 127 |  | 49.3 | 0.34 | 0.35 | 43 | 7.5 | 40.1 | — |
| 128 |  | 49.3 | 0.34 | 0.35 | 54 | 9.0 | 34.1 | — |
| 129 |  | 49.3 | 0.30 | 0.35 | 0 | 1.5 | 60.2 | — |
| 130 |  | 49.3 | 0.30 | 0.35 | 0 | 1.5 | 55.5 | — |
| 131 |  | 49.3 | 0.30 | 0.35 | 0 | 1.5 | 62.1 | — |
| 132 |  | 49.3 | 0.30 | 0.35 | 33 | 6.0 | 54.6 | — |
| 133 |  | 49.3 | 0.30 | 0.35 | 33 | 6.0 | 46.2 | — |
| 134 |  | 49.3 | 0.30 | 0.35 | 33 | 6.0 | 49.5 | — |
| 135 |  | 49.3 | 0.30 | 0.35 | 43 | 7.5 | 43.8 | — |
| 136 |  | 49.3 | 0.30 | 0.35 | 43 | 7.5 | 38.7 | — |
| 137 |  | 49.3 | 0.30 | 0.35 | 43 | 7.5 | 46.0 | — |
| 138 |  | 49.3 | 0.30 | 0.35 | 53 | 9.0 | 34.8 | — |
| 139 |  | 49.3 | 0.30 | 0.35 | 53 | 9.0 | 37.4 | — |
| 140 |  | 49.3 | 0.30 | 0.35 | 53 | 9.0 | 33.8 | — |
| 141 |  | 49.3 | 0.30 | 0.35 | 0 | 1.5 | 48.4 | 39.2 |
| 142 |  | 49.3 | 0.30 | 0.35 | 0 | 1.5 | 50.3 | 44.6 |
| 143 |  | 49.3 | 0.30 | 0.35 | 0 | 1.5 | 57.1 | 40.8 |
| 144 |  | 49.3 | 0.30 | 0.35 | 33 | 6.0 | 34.4 | 32.6 |
| 145 |  | 49.3 | 0.30 | 0.35 | 33 | 6.0 | 36.7 | 31.5 |
| 146 |  | 49.3 | 0.30 | 0.35 | 33 | 6.0 | 40.5 | 37.3 |
| 147 |  | 49.3 | 0.30 | 0.35 | 43 | 7.5 | 30.5 | 30.8 |
| 148 |  | 49.3 | 0.30 | 0.35 | 43 | 7.5 | 33.1 | 33.4 |
| 149 |  | 49.3 | 0.30 | 0.35 | 43 | 7.5 | 37.8 | 34.5 |
| 150 |  | 49.3 | 0.30 | 0.35 | 53 | 9.0 | 26.1 | 29.5 |
| 151 |  | 49.3 | 0.30 | 0.35 | 53 | 9.0 | 29.1 | 26.9 |
| 152 |  | 49.3 | 0.30 | 0.35 | 53 | 9.0 | 29.7 | 24.3 |
| 153 | Liang et al. (2014) [53] | 36.4 | 0.47 | 0.30 | 0 | 0.5 | 30.6 | — |
| 154 |  | 36.4 | 0.47 | 0.30 | 0 | 0.5 | 31.3 | — |
| 155 |  | 36.4 | 0.47 | 0.30 | 0 | 0.5 | 29.8 | — |
| 156 |  | 36.4 | 0.44 | 0.30 | 33 | 1.4 | 29.4 | — |
| 157 |  | 36.4 | 0.44 | 0.30 | 33 | 1.4 | 30.1 | — |
| 158 |  | 36.4 | 0.44 | 0.30 | 33 | 1.4 | 29.3 | — |
| 159 |  | 36.4 | 0.42 | 0.30 | 54 | 2.0 | 24.4 | — |
| 160 |  | 36.4 | 0.42 | 0.30 | 54 | 2.0 | 24.5 | — |
| 161 |  | 36.4 | 0.42 | 0.30 | 54 | 2.0 | 25.0 | — |
| 162 |  | 36.4 | 0.36 | 0.30 | 100 | 3.4 | 16.1 | — |
| 163 |  | 36.4 | 0.36 | 0.30 | 100 | 3.4 | 19.5 | — |
| 164 |  | 36.4 | 0.36 | 0.30 | 100 | 3.4 | 15.5 | — |
| 165 |  | 36.4 | 0.47 | 0.30 | 0 | 0.5 | 31.3 | 32.2 |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 166 |  | 36.4 | 0.47 | 0.30 | 0 | 0.5 | 29.1 | — |
| 167 |  | 36.4 | 0.47 | 0.30 | 0 | 0.5 | 30.2 | — |
| 168 |  | 36.4 | 0.44 | 0.30 | 33 | 1.4 | 29.2 | — |
| 169 |  | 36.4 | 0.44 | 0.30 | 33 | 1.4 | 25.0 | — |
| 170 |  | 36.4 | 0.44 | 0.30 | 33 | 1.4 | 26.8 | — |
| 171 |  | 36.4 | 0.42 | 0.30 | 54 | 2.0 | 27.3 | — |
| 172 |  | 36.4 | 0.42 | 0.30 | 54 | 2.0 | 22.7 | — |
| 173 |  | 36.4 | 0.42 | 0.30 | 54 | 2.0 | 23.7 | — |
| 174 |  | 36.4 | 0.36 | 0.30 | 100 | 3.4 | 19.3 | — |
| 175 |  | 36.4 | 0.36 | 0.30 | 100 | 3.4 | 16.2 | — |
| 176 |  | 36.4 | 0.36 | 0.30 | 100 | 3.4 | 15.3 | — |
| 177 | Zhao et al. (2014) [54] | 36.4 | 0.62 | 0.37 | 0 | 0.8 | 24.2 | 29.0 |
| 178 |  | 36.4 | 0.62 | 0.37 | 0 | 0.8 | 21.9 | 27.8 |
| 179 |  | 36.4 | 0.62 | 0.37 | 0 | 0.8 | 21.9 | 28.9 |
| 180 |  | 36.4 | 0.60 | 0.37 | 0 | 0.8 | 22.6 | 34.2 |
| 181 |  | 36.4 | 0.60 | 0.37 | 0 | 0.8 | 24.1 | 30.1 |
| 182 |  | 36.4 | 0.60 | 0.37 | 0 | 0.8 | 23.7 | 34.4 |
| 183 |  | 36.4 | 0.52 | 0.37 | 27 | 4.0 | 24.9 | 24.5 |
| 184 |  | 36.4 | 0.52 | 0.37 | 27 | 4.0 | 24.6 | 22.6 |
| 185 |  | 36.4 | 0.52 | 0.37 | 27 | 4.0 | 24.0 | 22.0 |
| 186 |  | 36.4 | 0.51 | 0.37 | 27 | 4.0 | 25.8 | 27.3 |
| 187 |  | 36.4 | 0.51 | 0.37 | 27 | 4.0 | 27.4 | 26.2 |
| 188 |  | 36.4 | 0.51 | 0.37 | 27 | 4.0 | 28.2 | 26.4 |
| 189 |  | 36.4 | 0.47 | 0.37 | 46 | 6.5 | 25.1 | 20.9 |
| 190 |  | 36.4 | 0.47 | 0.37 | 46 | 6.5 | 24.1 | 21.1 |
| 191 |  | 36.4 | 0.47 | 0.37 | 46 | 6.5 | 25.5 | 20.7 |
| 192 |  | 36.4 | 0.47 | 0.37 | 46 | 6.5 | 23.0 | 22.7 |
| 193 |  | 36.4 | 0.47 | 0.37 | 46 | 6.5 | 24.0 | 22.5 |
| 194 |  | 36.4 | 0.47 | 0.37 | 46 | 6.5 | 23.7 | 22.6 |
| 195 |  | 36.4 | 0.42 | 0.37 | 67 | 9.2 | 22.7 | 15.9 |
| 196 |  | 36.4 | 0.42 | 0.37 | 67 | 9.2 | 24.5 | 15.8 |
| 197 |  | 36.4 | 0.42 | 0.37 | 67 | 9.2 | 24.5 | 15.7 |
| 198 |  | 36.4 | 0.42 | 0.37 | 67 | 9.2 | 23.6 | 17.8 |
| 199 |  | 36.4 | 0.42 | 0.37 | 67 | 9.2 | 25.1 | 18.3 |
| 200 |  | 36.4 | 0.42 | 0.37 | 67 | 9.2 | 23.7 | 17.8 |
| 201 |  | 36.4 | 0.35 | 0.37 | 100 | 14.1 | 23.8 | — |
| 202 |  | 36.4 | 0.35 | 0.37 | 100 | 14.1 | 21.8 | — |
| 203 |  | 36.4 | 0.35 | 0.37 | 100 | 14.1 | 22.8 | — |
| 204 |  | 36.4 | 0.36 | 0.37 | 100 | 14.1 | 23.6 | — |
| 205 |  | 36.4 | 0.36 | 0.37 | 100 | 14.1 | 22.5 | 16.3 |
| 206 |  | 36.4 | 0.36 | 0.37 | 100 | 14.1 | 23.2 | 16.2 |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 207 | Chen & Bi (2014) [64] | 49.3 | 0.58 | 0.33 | 0 | 1.6 | 19.7 | — |
| 208 |  | 49.3 | 0.58 | 0.33 | 33 | 6.0 | 18.1 | — |
| 209 |  | 49.3 | 0.58 | 0.33 | 54 | 9.0 | 18.8 | — |
| 210 |  | 49.3 | 0.58 | 0.33 | 100 | 16.3 | 16.6 | — |
| 211 |  | 49.3 | 0.45 | 0.30 | 0 | 1.6 | 26.7 | — |
| 212 |  | 49.3 | 0.45 | 0.30 | 33 | 6.0 | 23.0 | — |
| 213 |  | 49.3 | 0.45 | 0.30 | 54 | 9.0 | 25.2 | — |
| 214 |  | 49.3 | 0.45 | 0.30 | 100 | 16.3 | 23.3 | — |
| 215 |  | 49.3 | 0.48 | 0.30 | 0 | 1.6 | 35.2 | — |
| 216 |  | 49.3 | 0.48 | 0.30 | 33 | 6.0 | 31.2 | — |
| 217 |  | 49.3 | 0.48 | 0.30 | 54 | 9.0 | 34.0 | — |
| 218 |  | 49.3 | 0.48 | 0.30 | 100 | 16.3 | 29.4 | — |
| 219 | Aliabdo et al. (2014) [48] | 49.3 | 0.50 | 0.40 | 0 | 0.7 | 27.3 | 34.3 |
| 220 |  | 49.3 | 0.50 | 0.41 | 23 | 3.8 | 26.8 | 32.3 |
| 221 |  | 49.3 | 0.50 | 0.43 | 48 | 7.2 | 25.9 | 26.9 |
| 222 |  | 49.3 | 0.50 | 0.44 | 73 | 11.1 | 20.3 | — |
| 223 |  | 49.3 | 0.50 | 0.46 | 100 | 15.5 | 17.3 | 20.5 |
| 224 |  | 49.3 | 0.70 | 0.40 | 0 | 0.7 | 17.9 | 28.2 |
| 225 |  | 49.3 | 0.70 | 0.41 | 23 | 3.8 | 16.9 | 27.5 |
| 226 |  | 49.3 | 0.70 | 0.43 | 48 | 7.2 | 16.8 | 25.4 |
| 227 |  | 49.3 | 0.70 | 0.44 | 73 | 11.1 | 14.3 | 20.2 |
| 228 |  | 49.3 | 0.70 | 0.46 | 100 | 15.5 | 12.4 | 16.0 |
| 229 | Li et al. (2015) [63] | 49.3 | 0.36 | 0.41 | 0 | 0.5 | 51.0 | — |
| 230 |  | 49.3 | 0.36 | 0.41 | 54 | 5.6 | 43.3 | — |
| 231 |  | 49.3 | 0.36 | 0.41 | 100 | 10.7 | 36.6 | — |
| 232 |  | 49.3 | 0.44 | 0.39 | 0 | 0.5 | 44.0 | — |
| 233 |  | 49.3 | 0.44 | 0.39 | 54 | 5.6 | 32.7 | — |
| 234 |  | 49.3 | 0.44 | 0.39 | 100 | 10.7 | 31.5 | — |
| 235 |  | 49.3 | 0.48 | 0.39 | 0 | 0.5 | 37.4 | — |
| 236 |  | 49.3 | 0.48 | 0.39 | 54 | 5.7 | 28.8 | — |
| 237 |  | 49.3 | 0.48 | 0.39 | 100 | 10.7 | 28.4 | — |
| 238 | Gu (2015) [67] | 49.3 | 0.38 | 0.34 | 0 | 1.7 | 51.5 | — |
| 239 |  | 49.3 | 0.38 | 0.34 | 0 | 1.7 | 51.8 | — |
| 240 |  | 49.3 | 0.38 | 0.34 | 0 | 1.7 | 45.8 | — |
| 241 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 42.8 | — |
| 242 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 42.5 | — |
| 243 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 43.8 | — |
| 244 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 42.3 | — |
| 245 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 45.4 | — |
| 246 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 44.0 | — |
| 247 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 46.1 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 248 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 41.5 | — |
| 249 |  | 49.3 | 0.38 | 0.34 | 33 | 5.9 | 38.7 | — |
| 250 | Chen et al. (2015) [68] | 36.4 | 0.45 | 0.30 | 0 | 1.6 | 26.7 | — |
| 251 |  | 36.4 | 0.45 | 0.30 | 22 | 4.5 | 22.6 | — |
| 252 |  | 36.4 | 0.45 | 0.30 | 33 | 6.0 | 22.0 | — |
| 253 |  | 36.4 | 0.45 | 0.30 | 54 | 9.0 | 20.4 | — |
| 254 | Niu (2016) [66] | 36.4 | 0.53 | 0.36 | 0 | 0.7 | 26.6 | — |
| 255 |  | 36.4 | 0.48 | 0.36 | 30 | 4.3 | 26.3 | — |
| 256 |  | 36.4 | 0.45 | 0.36 | 50 | 7.0 | 23.2 | — |
| 257 |  | 36.4 | 0.42 | 0.37 | 70 | 9.7 | 23.7 | — |
| 258 |  | 36.4 | 0.38 | 0.37 | 100 | 14.2 | 22.0 | — |
| 259 | Zhang (2017) [47] | 49.3 | 0.40 | 0.35 | 100 | 13.8 | 20.4 | — |
| 260 |  | 49.3 | 0.40 | 0.35 | 100 | 13.8 | 23.9 | — |
| 261 |  | 49.3 | 0.40 | 0.35 | 100 | 13.8 | 22.2 | — |
| 262 |  | 49.3 | 0.45 | 0.37 | 100 | 13.8 | 19.8 | — |
| 263 |  | 49.3 | 0.45 | 0.37 | 100 | 13.8 | 14.3 | — |
| 264 |  | 49.3 | 0.45 | 0.37 | 100 | 13.8 | 16.3 | — |
| 265 |  | 49.3 | 0.50 | 0.37 | 100 | 13.8 | 16.6 | — |
| 266 |  | 49.3 | 0.50 | 0.37 | 100 | 13.8 | 13.1 | — |
| 267 |  | 49.3 | 0.50 | 0.37 | 100 | 13.8 | 15.5 | — |
| 268 |  | 49.3 | 0.55 | 0.40 | 100 | 13.8 | 15.1 | — |
| 269 |  | 49.3 | 0.55 | 0.40 | 100 | 13.8 | 12.3 | — |
| 270 |  | 49.3 | 0.55 | 0.40 | 100 | 13.8 | 15.6 | — |
| 271 |  | 49.3 | 0.60 | 0.40 | 100 | 13.8 | 15.5 | — |
| 272 |  | 49.3 | 0.60 | 0.40 | 100 | 13.8 | 15.6 | — |
| 273 |  | 49.3 | 0.60 | 0.40 | 100 | 13.8 | 13.2 | — |
| 274 |  | 49.3 | 0.40 | 0.41 | 100 | 13.8 | 24.1 | — |
| 275 |  | 49.3 | 0.40 | 0.41 | 100 | 13.8 | 19.8 | — |
| 276 |  | 49.3 | 0.40 | 0.41 | 100 | 13.8 | 23.5 | — |
| 277 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 18.6 | — |
| 278 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 15.6 | — |
| 279 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 18.9 | — |
| 280 |  | 49.3 | 0.50 | 0.42 | 100 | 13.8 | 22.5 | — |
| 281 |  | 49.3 | 0.50 | 0.42 | 100 | 13.8 | 23.8 | — |
| 282 |  | 49.3 | 0.50 | 0.42 | 100 | 13.8 | 23.4 | — |
| 283 |  | 49.3 | 0.55 | 0.45 | 100 | 13.8 | 14.8 | — |
| 284 |  | 49.3 | 0.55 | 0.45 | 100 | 13.8 | 13.9 | — |
| 285 |  | 49.3 | 0.55 | 0.45 | 100 | 13.8 | 14.6 | — |
| 286 |  | 49.3 | 0.60 | 0.45 | 100 | 13.8 | 15.5 | — |
| 287 |  | 49.3 | 0.60 | 0.45 | 100 | 13.8 | 15.9 | — |
| 288 |  | 49.3 | 0.60 | 0.45 | 100 | 13.8 | 14.0 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 289 |  | 49.3 | 0.40 | 0.41 | 100 | 13.8 | 21.1 | — |
| 290 |  | 49.3 | 0.40 | 0.41 | 100 | 13.8 | 20.3 | — |
| 291 |  | 49.3 | 0.40 | 0.41 | 100 | 13.8 | 22.6 | — |
| 292 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 19.7 | — |
| 293 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 15.2 | — |
| 294 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 19.5 | — |
| 295 |  | 49.3 | 0.50 | 0.42 | 100 | 13.8 | 13.9 | — |
| 296 |  | 49.3 | 0.50 | 0.42 | 100 | 13.8 | 16.3 | — |
| 297 |  | 49.3 | 0.50 | 0.42 | 100 | 13.8 | 13.3 | — |
| 298 |  | 49.3 | 0.55 | 0.45 | 100 | 13.8 | 13.1 | — |
| 299 |  | 49.3 | 0.55 | 0.45 | 100 | 13.8 | 14.8 | — |
| 300 |  | 49.3 | 0.55 | 0.45 | 100 | 13.8 | 14.8 | — |
| 301 |  | 49.3 | 0.60 | 0.45 | 100 | 13.8 | 14.6 | — |
| 302 |  | 49.3 | 0.60 | 0.45 | 100 | 13.8 | 14.3 | — |
| 303 |  | 49.3 | 0.60 | 0.45 | 100 | 13.8 | 12.1 | — |
| 304 |  | 49.3 | 0.40 | 0.41 | 100 | 18.7 | 20.2 | — |
| 305 |  | 49.3 | 0.40 | 0.41 | 100 | 18.7 | 16.8 | — |
| 306 |  | 49.3 | 0.40 | 0.41 | 100 | 18.7 | 17.5 | — |
| 307 |  | 49.3 | 0.45 | 0.42 | 100 | 18.7 | 16.2 | — |
| 308 |  | 49.3 | 0.45 | 0.42 | 100 | 18.7 | 16.7 | — |
| 309 |  | 49.3 | 0.45 | 0.42 | 100 | 18.7 | 19.8 | — |
| 310 |  | 49.3 | 0.50 | 0.42 | 100 | 18.7 | 13.8 | — |
| 311 |  | 49.3 | 0.50 | 0.42 | 100 | 18.7 | 12.5 | — |
| 312 |  | 49.3 | 0.50 | 0.42 | 100 | 18.7 | 13.3 | — |
| 313 |  | 49.3 | 0.55 | 0.45 | 100 | 18.7 | 14.7 | — |
| 314 |  | 49.3 | 0.55 | 0.45 | 100 | 18.7 | 14.5 | — |
| 315 |  | 49.3 | 0.55 | 0.45 | 100 | 18.7 | 12.2 | — |
| 316 |  | 49.3 | 0.60 | 0.45 | 100 | 18.7 | 13.2 | — |
| 317 |  | 49.3 | 0.60 | 0.45 | 100 | 18.7 | 15.7 | — |
| 318 |  | 49.3 | 0.60 | 0.45 | 100 | 18.7 | 13.3 | — |
| 319 |  | 49.3 | 0.45 | 0.42 | 100 | 13.8 | 32.8 | 26.3 |
| 320 |  | 49.3 | 0.45 | 0.42 | 100 | 18.7 | 28.3 | 18.4 |
| 321 | Rahman (2017) [71] | 36.4 | 0.75 | 0.50 | 100 | 16.0 | 17.2 | 15.1 |
| 322 |  | 36.4 | 0.69 | 0.49 | 100 | 16.0 | 20.7 | 16.6 |
| 323 |  | 36.4 | 0.63 | 0.49 | 100 | 16.0 | 24.2 | 17.9 |
| 324 |  | 36.4 | 0.75 | 0.45 | 0 | 0.5 | 19.4 | 13.5 |
| 325 |  | 36.4 | 0.69 | 0.44 | 0 | 0.5 | 22.7 | 14.9 |
| 326 |  | 36.4 | 0.63 | 0.43 | 0 | 0.5 | 26.7 | 16.1 |
| 327 |  | 36.4 | 0.75 | 0.49 | 100 | 15.8 | 16.3 | — |
| 328 |  | 36.4 | 0.69 | 0.48 | 100 | 15.8 | 19.7 | — |
| 329 |  | 36.4 | 0.63 | 0.48 | 100 | 15.8 | 22.8 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 330 | Liu et al. (2017) [62] | 49.3 | 0.46 | 0.38 | 0 | 0.5 | 36.7 | — |
| 331 |  | 49.3 | 0.46 | 0.38 | 33 | 4.4 | 33.1 | — |
| 332 |  | 49.3 | 0.46 | 0.38 | 54 | 7.1 | 26.8 | — |
| 333 |  | 49.3 | 0.46 | 0.38 | 73 | 9.7 | 24.1 | — |
| 334 | Yuan et al. (2018) [49] | 49.3 | 0.40 | 0.41 | 0 | 1.2 | 42.3 | — |
| 335 |  | 49.3 | 0.40 | 0.41 | 100 | 18.4 | 21.1 | — |
| 336 | Li et al. (2018) [58] | 49.3 | 0.42 | 0.40 | 0 | 0.1 | 43.3 | — |
| 337 |  | 49.3 | 0.42 | 0.41 | 51 | 6.8 | 37.0 | — |
| 338 |  | 49.3 | 0.42 | 0.42 | 100 | 14.1 | 34.6 | — |
| 339 | Yang (2018) [61] | 49.3 | 0.40 | 0.30 | 0 | 0.5 | 34.8 | 32.4 |
| 340 |  | 49.3 | 0.40 | 0.30 | 33 | 6.5 | 33.2 | 29.8 |
| 341 | Zheng et al. (2018) [50] | 49.3 | 0.56 | 0.35 | 0 | 1.2 | 21.5 | — |
| 342 |  | 49.3 | 0.56 | 0.35 | 28 | 4.6 | 21.3 | — |
| 343 |  | 49.3 | 0.56 | 0.36 | 56 | 8.4 | 20.3 | — |
| 344 |  | 49.3 | 0.56 | 0.35 | 78 | 11.5 | 19.9 | — |
| 345 |  | 49.3 | 0.56 | 0.35 | 100 | 14.9 | 19.1 | — |
| 346 |  | 49.3 | 0.35 | 0.28 | 0 | 1.2 | 43.8 | — |
| 347 |  | 49.3 | 0.35 | 0.28 | 28 | 4.6 | 42.4 | — |
| 348 |  | 49.3 | 0.35 | 0.28 | 54 | 8.1 | 40.4 | — |
| 349 |  | 49.3 | 0.35 | 0.28 | 78 | 11.5 | 38.9 | — |
| 350 |  | 49.3 | 0.35 | 0.28 | 100 | 14.9 | 38.0 | — |
| 351 | Paul et al. (2018) [70] | 36.4 | 0.45 | 0.46 | 100 | 10.0 | 25.1 | 24.3 |
| 352 |  | 36.4 | 0.55 | 0.46 | 100 | 10.0 | 22.0 | 17.8 |
| 353 |  | 36.4 | 0.45 | 0.48 | 100 | 14.4 | 25.0 | 17.7 |
| 354 |  | 36.4 | 0.45 | 0.48 | 100 | 14.4 | 20.4 | 15.6 |
| 355 |  | 36.4 | 0.55 | 0.48 | 100 | 14.4 | 15.9 | 12.5 |
| 356 |  | 36.4 | 0.45 | 0.49 | 100 | 16.2 | 28.9 | 19.9 |
| 357 |  | 36.4 | 0.45 | 0.49 | 100 | 19.0 | 22.6 | 16.4 |
| 358 |  | 36.4 | 0.45 | 0.51 | 100 | 10.7 | 21.5 | 18.1 |
| 359 |  | 36.4 | 0.45 | 0.48 | 100 | 15.2 | 31.2 | 19.0 |
| 360 |  | 36.4 | 0.45 | 0.49 | 100 | 19.5 | 29.2 | 17.3 |
| 361 |  | 36.4 | 0.55 | 0.48 | 100 | 17.4 | 24.5 | 15.1 |
| 362 |  | 36.4 | 0.45 | 0.48 | 100 | 17.4 | 25.2 | 17.6 |
| 363 |  | 36.4 | 0.40 | 0.48 | 100 | 17.4 | 25.9 | 17.6 |
| 364 |  | 36.4 | 0.55 | 0.51 | 100 | 22.8 | 17.1 | 13.4 |
| 365 |  | 36.4 | 0.45 | 0.51 | 100 | 22.8 | 19.4 | 15.1 |
| 366 |  | 36.4 | 0.40 | 0.51 | 100 | 22.8 | 19.8 | 17.3 |
| 367 |  | 36.4 | 0.55 | 0.51 | 100 | 25.2 | 14.5 | 12.3 |
| 368 |  | 36.4 | 0.45 | 0.51 | 100 | 25.2 | 14.9 | 12.7 |
| 369 |  | 36.4 | 0.40 | 0.51 | 100 | 25.2 | 15.2 | 13.1 |
| 370 |  | 36.4 | 0.55 | 0.48 | 100 | 18.0 | 23.7 | 16.3 |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 371 |  | 36.4 | 0.55 | 0.50 | 100 | 18.5 | 23.0 | 14.3 |
| 372 |  | 36.4 | 0.55 | 0.50 | 100 | 19.0 | 21.4 | 14.5 |
| 373 | Alwash & Al-Khafaji (2018) [82] | 49.3 | 0.45 | 0.43 | 0 | 1.2 | 35.0 | 34.5 |
| 374 |  | 49.3 | 0.45 | 0.44 | 6 | 1.8 | 27.8 | 30.6 |
| 375 |  | 49.3 | 0.45 | 0.45 | 12 | 2.4 | 31.0 | 32.3 |
| 376 |  | 49.3 | 0.45 | 0.47 | 17 | 3.1 | 33.4 | 33.7 |
| 377 | Huang et al. (2020) [60] | 49.3 | 0.46 | 0.35 | 0 | 3.2 | 33.2 | — |
| 378 |  | 49.3 | 0.42 | 0.35 | 28 | 5.3 | 32.6 | — |
| 379 |  | 49.3 | 0.37 | 0.35 | 54 | 7.3 | 31.8 | — |
| 380 |  | 49.3 | 0.33 | 0.35 | 78 | 9.4 | 31.2 | — |
| 381 |  | 49.3 | 0.28 | 0.35 | 100 | 11.4 | 30.6 | — |
| 382 |  | 49.3 | 0.46 | 0.35 | 0 | 3.2 | 31.1 | — |
| 383 |  | 49.3 | 0.42 | 0.35 | 28 | 5.3 | 30.4 | — |
| 384 |  | 49.3 | 0.37 | 0.35 | 54 | 7.3 | 29.8 | — |
| 385 |  | 49.3 | 0.33 | 0.35 | 78 | 9.4 | 29.5 | — |
| 386 |  | 49.3 | 0.28 | 0.35 | 100 | 11.4 | 29.1 | — |
| 387 | Yang et al. (2020) [72] | 49.3 | 0.48 | 0.35 | 0 | 0.5 | 43.7 | 32.0 |
| 388 |  | 49.3 | 0.48 | 0.35 | 100 | 10.3 | 25.4 | — |
| 389 |  | 49.3 | 0.48 | 0.35 | 100 | 9.8 | 38.4 | 26.9 |
| 390 |  | 49.3 | 0.48 | 0.35 | 100 | 8.0 | 32.5 | — |
| 391 |  | 49.3 | 0.48 | 0.35 | 100 | 7.3 | 34.6 | 25.6 |
| 392 | Islam et al. (2020) [73] | 36.4 | 0.50 | 0.51 | 100 | 5.7 | 25.2 | — |
| 393 | Bheel et al. (2020) [76] | 49.3 | 0.52 | 0.33 | 0 | 0.6 | 17.0 | — |
| 394 |  | 49.3 | 0.52 | 0.34 | 20 | 3.0 | 13.9 | — |
| 395 |  | 49.3 | 0.52 | 0.40 | 40 | 6.9 | 13.7 | — |
| 396 |  | 49.3 | 0.52 | 0.31 | 60 | 6.9 | 12.5 | — |
| 397 |  | 49.3 | 0.52 | 0.36 | 80 | 11.2 | 11.4 | — |
| 398 | Pinchi et al. (2020) [79] | 49.3 | 0.50 | 0.45 | 0 | 0.5 | 34.2 | — |
| 399 |  | 49.3 | 0.50 | 0.49 | 18 | 4.0 | 26.2 | — |
| 400 | Bari et al. (2021)[31] | 36.4 | 0.45 | 0.41 | 100 | 12.8 | 28.8 | — |
| 401 |  | 36.4 | 0.50 | 0.41 | 100 | 12.8 | 28.5 | 20.9 |
| 402 |  | 36.4 | 0.55 | 0.41 | 100 | 12.8 | 26.9 | — |
| 403 | Azunna & Ogar (2021) [77] | 36.4 | 0.47 | 0.33 | 0 | 0.5 | 18.3 | — |
| 404 |  | 36.4 | 0.47 | 0.33 | 100 | 13.7 | 12.4 | — |
| 405 | Liang et al. (2021) [29] | 36.4 | 0.50 | 0.35 | 100 | 13.7 | 28.3 | — |
| 406 |  | 36.4 | 0.55 | 0.35 | 100 | 13.7 | 27.3 | — |
| 407 |  | 36.4 | 0.60 | 0.34 | 100 | 13.7 | 22.5 | — |
| 408 |  | 36.4 | 0.65 | 0.35 | 100 | 13.7 | 22.3 | — |
| 409 |  | 36.4 | 0.70 | 0.35 | 100 | 13.7 | 20.1 | — |
| 410 | Liu et al. (2021) [28] | 36.4 | 0.58 | 0.38 | 15 | 2.4 | 26.8 | 25.7 |
| 411 |  | 36.4 | 0.58 | 0.39 | 30 | 3.6 | 25.2 | 23.2 |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 412 |  | 36.4 | 0.58 | 0.39 | 45 | 4.9 | 21.4 | 21.5 |
| 413 |  | 36.4 | 0.58 | 0.40 | 60 | 6.2 | 20.0 | 19.2 |
| 414 | Xiong et al. (2021) [80] | 49.3 | 0.45 | 0.35 | 0 | 0.7 | 36.0 | — |
| 415 |  | 49.3 | 0.45 | 0.35 | 24 | 4.0 | 28.4 | — |
| 416 |  | 49.3 | 0.45 | 0.35 | 65 | 10.7 | 25.1 | — |
| 417 |  | 49.3 | 0.45 | 0.35 | 100 | 17.3 | 21.9 | — |
| 418 | Ge et al. (2021) [30] | 36.4 | 0.41 | 0.43 | 100 | 8.2 | 15.8 | — |
| 419 |  | 36.4 | 0.46 | 0.43 | 100 | 8.2 | 13.4 | — |
| 420 |  | 36.4 | 0.52 | 0.43 | 100 | 8.2 | 8.4 | — |
| 421 |  | 36.4 | 0.63 | 0.43 | 100 | 8.2 | 7.6 | — |
| 422 |  | 36.4 | 0.41 | 0.48 | 100 | 8.2 | 17.6 | — |
| 423 |  | 36.4 | 0.46 | 0.48 | 100 | 8.2 | 13.3 | — |
| 424 |  | 36.4 | 0.52 | 0.48 | 100 | 8.2 | 9.3 | — |
| 425 |  | 36.4 | 0.63 | 0.48 | 100 | 8.2 | 7.6 | — |
| 426 |  | 36.4 | 0.41 | 0.52 | 100 | 8.2 | 19.4 | — |
| 427 |  | 36.4 | 0.46 | 0.52 | 100 | 8.2 | 18.7 | — |
| 428 |  | 36.4 | 0.52 | 0.52 | 100 | 8.2 | 10.9 | — |
| 429 |  | 36.4 | 0.63 | 0.52 | 100 | 8.2 | 7.8 | — |
| 430 |  | 36.4 | 0.41 | 0.39 | 100 | 8.2 | 20.8 | — |
| 431 |  | 36.4 | 0.46 | 0.39 | 100 | 8.2 | 20.2 | — |
| 432 |  | 36.4 | 0.52 | 0.39 | 100 | 8.2 | 13.8 | — |
| 433 |  | 36.4 | 0.63 | 0.39 | 100 | 8.2 | 8.6 | — |
| 434 |  | 36.4 | 0.41 | 0.44 | 100 | 8.2 | 22.3 | — |
| 435 |  | 36.4 | 0.46 | 0.44 | 100 | 8.2 | 19.7 | — |
| 436 |  | 36.4 | 0.52 | 0.44 | 100 | 8.2 | 16.6 | — |
| 437 |  | 36.4 | 0.63 | 0.44 | 100 | 8.2 | 8.9 | — |
| 438 |  | 36.4 | 0.41 | 0.48 | 100 | 8.2 | 23.4 | — |
| 439 |  | 36.4 | 0.46 | 0.48 | 100 | 8.2 | 22.5 | — |
| 440 |  | 36.4 | 0.52 | 0.48 | 100 | 8.2 | 19.0 | — |
| 441 |  | 36.4 | 0.63 | 0.48 | 100 | 8.2 | 9.8 | — |
| 442 |  | 36.4 | 0.41 | 0.36 | 100 | 8.2 | 24.2 | — |
| 443 |  | 36.4 | 0.46 | 0.36 | 100 | 8.2 | 20.5 | — |
| 444 |  | 36.4 | 0.52 | 0.36 | 100 | 8.2 | 21.0 | — |
| 445 |  | 36.4 | 0.63 | 0.36 | 100 | 8.2 | 10.6 | — |
| 446 |  | 36.4 | 0.41 | 0.41 | 100 | 8.2 | 24.8 | — |
| 447 |  | 36.4 | 0.46 | 0.41 | 100 | 8.2 | 21.5 | — |
| 448 |  | 36.4 | 0.52 | 0.41 | 100 | 8.2 | 21.7 | — |
| 449 |  | 36.4 | 0.63 | 0.41 | 100 | 8.2 | 11.7 | — |
| 450 |  | 36.4 | 0.41 | 0.45 | 100 | 8.2 | 25.1 | — |
| 451 |  | 36.4 | 0.46 | 0.45 | 100 | 8.2 | 22.6 | — |
| 452 |  | 36.4 | 0.52 | 0.45 | 100 | 8.2 | 22.0 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 453 |  | 36.4 | 0.63 | 0.45 | 100 | 8.2 | 12.6 | — |
| 454 |  | 36.4 | 0.41 | 0.33 | 100 | 8.2 | 25.0 | — |
| 455 |  | 36.4 | 0.46 | 0.33 | 100 | 8.2 | 25.1 | — |
| 456 |  | 36.4 | 0.52 | 0.33 | 100 | 8.2 | 21.4 | — |
| 457 |  | 36.4 | 0.63 | 0.33 | 100 | 8.2 | 13.4 | — |
| 458 |  | 36.4 | 0.41 | 0.38 | 100 | 8.2 | 25.9 | — |
| 459 |  | 36.4 | 0.46 | 0.38 | 100 | 8.2 | 24.7 | — |
| 460 |  | 36.4 | 0.52 | 0.31 | 100 | 8.2 | 21.4 | — |
| 461 |  | 36.4 | 0.63 | 0.31 | 100 | 8.2 | 14.6 | — |
| 462 |  | 36.4 | 0.41 | 0.31 | 100 | 8.2 | 26.9 | — |
| 463 |  | 36.4 | 0.46 | 0.31 | 100 | 8.2 | 26.5 | — |
| 464 |  | 36.4 | 0.52 | 0.31 | 100 | 8.2 | 20.8 | — |
| 465 |  | 36.4 | 0.63 | 0.31 | 100 | 8.2 | 14.6 | — |
| 466 |  | 36.4 | 0.41 | 0.31 | 100 | 8.2 | 23.0 | — |
| 467 |  | 36.4 | 0.46 | 0.31 | 100 | 8.2 | 21.6 | — |
| 468 |  | 36.4 | 0.52 | 0.31 | 100 | 8.2 | 14.3 | — |
| 469 |  | 36.4 | 0.63 | 0.31 | 100 | 8.2 | 12.5 | — |
| 470 |  | 36.4 | 0.41 | 0.35 | 100 | 8.2 | 21.0 | — |
| 471 |  | 36.4 | 0.46 | 0.35 | 100 | 8.2 | 17.4 | — |
| 472 |  | 36.4 | 0.52 | 0.35 | 100 | 8.2 | 12.4 | — |
| 473 |  | 36.4 | 0.63 | 0.35 | 100 | 8.2 | 11.0 | — |
| 474 |  | 36.4 | 0.41 | 0.40 | 100 | 8.2 | 18.5 | — |
| 475 |  | 36.4 | 0.46 | 0.40 | 100 | 8.2 | 16.2 | — |
| 476 |  | 36.4 | 0.52 | 0.40 | 100 | 8.2 | 11.1 | — |
| 477 |  | 36.4 | 0.63 | 0.40 | 100 | 8.2 | 8.8 | — |
| 478 |  | 36.4 | 0.41 | 0.29 | 100 | 8.2 | 13.8 | — |
| 479 |  | 36.4 | 0.46 | 0.29 | 100 | 8.2 | 10.5 | — |
| 480 |  | 36.4 | 0.52 | 0.29 | 100 | 8.2 | 9.3 | — |
| 481 |  | 36.4 | 0.63 | 0.29 | 100 | 8.2 | 8.2 | — |
| 482 |  | 36.4 | 0.41 | 0.33 | 100 | 8.2 | 12.9 | — |
| 483 |  | 36.4 | 0.46 | 0.33 | 100 | 8.2 | 9.8 | — |
| 484 |  | 36.4 | 0.52 | 0.33 | 100 | 8.2 | 9.0 | — |
| 485 |  | 36.4 | 0.63 | 0.33 | 100 | 8.2 | 7.7 | — |
| 486 |  | 36.4 | 0.41 | 0.37 | 100 | 8.2 | 12.4 | — |
| 487 |  | 36.4 | 0.46 | 0.37 | 100 | 8.2 | 9.0 | — |
| 488 |  | 36.4 | 0.52 | 0.37 | 100 | 8.2 | 8.9 | — |
| 489 |  | 36.4 | 0.41 | 0.20 | 100 | 0.8 | 20.6 | — |
| 490 |  | 36.4 | 0.48 | 0.24 | 100 | 8.2 | 18.1 | — |
| 491 |  | 36.4 | 0.68 | 0.29 | 100 | 8.2 | 9.8 | — |
| 492 |  | 36.4 | 0.41 | 0.46 | 100 | 8.2 | 25.4 | — |
| 493 |  | 36.4 | 0.48 | 0.46 | 100 | 8.2 | 20.9 | — |
| (*continued on next page*) | | | | | | | | |
| (*continued* ) | | | | | | | | |
| No. | Source | fce (MPa) | *w*eff/c | *s/a* | η (%) | wm,wa (%) | fc (MPa) | Ec (GPa) |
| 494 |  | 36.4 | 0.57 | 0.46 | 100 | 8.2 | 15.4 | — |
| 495 |  | 36.4 | 0.68 | 0.46 | 100 | 8.2 | 9.4 | — |
| 496 |  | 36.4 | 0.41 | 0.35 | 100 | 8.2 | 24.8 | — |
| 497 |  | 36.4 | 0.48 | 0.36 | 100 | 8.2 | 21.4 | — |
| 498 |  | 36.4 | 0.57 | 0.36 | 100 | 8.2 | 16.8 | — |
| 499 |  | 36.4 | 0.68 | 0.36 | 100 | 8.2 | 11.2 | — |
| 500 | Chang et al. (2022) [74] | 36.4 | 0.40 | 0.35 | 0 | 0.5 | 29.8 | — |
| 501 |  | 36.4 | 0.40 | 0.35 | 17 | 2.1 | 27.9 | — |
| 502 |  | 36.4 | 0.40 | 0.35 | 33 | 3.7 | 26.5 | — |
| 503 |  | 36.4 | 0.40 | 0.35 | 49 | 5.3 | 24.4 | — |
| 504 |  | 36.4 | 0.40 | 0.35 | 64 | 6.9 | 22.9 | — |
| 505 | Ji et al. (2022) [75] | 49.3 | 0.40 | 0.35 | 0 | 1.5 | 26.6 | — |
| 506 |  | 49.3 | 0.40 | 0.36 | 25 | 5.0 | 24.4 | — |
| 507 |  | 49.3 | 0.40 | 0.38 | 50 | 9.0 | 22.7 | — |
| 508 |  | 49.3 | 0.40 | 0.39 | 75 | 13.5 | 21.2 | — |
| 509 |  | 49.3 | 0.40 | 0.41 | 100 | 18.6 | 18.9 | — |
| 510 | Abdulkader et al. (2022) [78] | 36.4 | 0.56 | 0.31 | 0 | 2.1 | 36.3 | 28.5 |
| 511 |  | 36.4 | 0.50 | 0.31 | 0 | 2.1 | 43.4 | — |
| 512 |  | 36.4 | 0.45 | 0.31 | 0 | 2.1 | 49.7 | 31.6 |
| 513 |  | 36.4 | 0.56 | 0.31 | 100 | 10.0 | 30.6 | 27.5 |
| 514 |  | 36.4 | 0.50 | 0.31 | 100 | 10.0 | 38.6 | — |
| 515 |  | 36.4 | 0.45 | 0.31 | 100 | 10.0 | 42.7 | 26.5 |
| 516 | Roy et al. (2023) [32] | 49.3 | 0.75 | 0.54 | 100 | 10.1 | 17.1 | 14.4 |
| 517 |  | 49.3 | 0.75 | 0.55 | 100 | 13.6 | 16.6 | 13.3 |
| 518 |  | 49.3 | 0.68 | 0.54 | 100 | 10.1 | 20.0 | 15.5 |
| 519 |  | 49.3 | 0.68 | 0.55 | 100 | 13.6 | 19.0 | 13.9 |
| 520 |  | 49.3 | 0.63 | 0.53 | 100 | 10.1 | 23.3 | 17.0 |
| 521 |  | 49.3 | 0.63 | 0.54 | 100 | 13.6 | 20.2 | 15.0 |