Supplementary Material

## Supplementary Figures



**Figure S1.** TG and DTG curves of GB-derived biosilica.



**Figure S2.** FTIR spectra of biosilicas obtained from the different marine sponges.

## Supplementary Tables

**Table S1.** pH of DMEM before and after 3 days of incubation in the presence of biosilica particles

|  |  |  |
| --- | --- | --- |
| **Sample\*** | **pH of DMEM** | |
| **before incubation** | **after 3d of incubation** |
| **GA** | 8.1 | 8.8 |
| **GB** | 8.2 | 8.4 |
| **SN** | 8.2 | 8.5 |
| **AI** | 8.0 | 8.7 |
| **PV** | 7.9 | 8.2 |

\* DMEM in the presence of the corresponding biosilica.

**Table S2.** ICP analysis of DMEM before (control) and after 3 day of incubation in the presence of biosilica particles

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Concentration, µg/mL** | | | | | | |
| **Ca** | **K** | **Mg** | **Na** | **P** | **Al** | **Si** |
| **DMEM (control)** | 116.142  ±0.041 | 300.385  ±0.173 | 31.559  ± 0.004 | 4042.528  ± 1.546 | 40.903  ± 0.065 | 0 | 7.486  ±0.004 |
| **GA** | 72.640  ± 0.008 | 312.753  ±0.110 | 34.760  ± 0.003 | 4181.305  ± 0.902 | 11.632  ± 0.069 | 0 | 112.780  ± 0.013 |
| **GB** | 77.808  ± 0.019 | 360.620  ±0.167 | 45.030  ± 0.008 | 4602.460  ± 0.186 | 39.053  ± 0.075 | 0 | 88.131  ± 0.037 |
| **SN** | 131.971  ± 0.046 | 480.614  ±0.206 | 54.131  ± 0.004 | 4741.862  ± 0.398 | 14.790  ± 0.006 | 0 | 86.900  ± 0.017 |
| **AI** | 86.211  ±0.019 | 332.393± 0.167 | 41.089  ±0.008 | 3943.505  ±0.186 | 29.459  ±0.075 | 0 | 73.867  ±0.037 |
| **PV** | 114.639  ±0.010 | 383.177  ±0.080 | 51.501  ± 0.004 | 4535.507  ± 0.967 | 23.490  ± 0.008 | 0 | 70.101  ± 0.008 |