|  |  |
| --- | --- |
|  |  |
|  |  |

**Fig. S\_1:** Ascertainment of the size of crystallite through the linear straight-line model of Scherrer equation (A), Monshi-Scherrer equation (B), Uniform deformation modelequation (C), and, Uniform stress deformation model equation (D) for S-CaSiO3

|  |  |
| --- | --- |
|  |  |
|  |  |

**Fig. S\_2:** Ascertainment of the size of crystallite through the Uniform deformation energy density model equation (A), Sahadat-Scherrer equation (B), size-strain plot equation (C), Halder-Wagner equation (D) for S-CaSiO3

|  |  |
| --- | --- |
|  |  |
|  |  |

**Fig. S\_3:** Ascertainment of the size of crystallite through the linear straight-line model of Scherrer equation (A), Monshi-Scherrer equation (B), Uniform deformation modelequation (C), and, Uniform stress deformation model equation (D) for C-CaSiO3

|  |  |
| --- | --- |
|  |  |
|  |  |

**Fig. S\_4:** Ascertainment of the size of crystallite through the Uniform deformation energy density model equation (A), Sahadat-Scherrer equation (B), size-strain plot equation (C), Halder-Wagner equation (D) for C-CaSiO3

|  |  |
| --- | --- |
|  |  |
|  |

**Fig. S\_5:** Schematic depiction of the optical band gap of synthesized E-CaSiO3, S-CaSiO3, and C-CaSiO3