

Supplementary Materials

Polyimide-silica composite aerogel microspheres for thermal insulation and flame retardancy

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Table 1 Characterization instrument information for aerogel microspheres

Instrument Name	manufacturer	model number	country of origin
Fourier transform infrared spectrometer	Thermo Fisher Scientific	Nicolet iS20	America
X-ray diffraction	Rigaku Corporation	MiniFlex600	Japan
laser thermal conductivity analyzer	Netzsch Group	LFA-457	Germany
Scanning Electron Microscope	Thermo Fisher Scientific	Thermos Cientific Apreo2C	America
Specific surface area tester	Beijing Jwgb Sci.& Tech. Co., Ltd.	JW-BK112	China
Thermodynamic analyzer	Kep Boyuan (Wuxi) Technologies Co., Ltd	Setline STA	China
infrared thermal imaging camera	Uni-Trend Technology (China) Co., Ltd.	UTi 260B	China
microcalorimeter	Deatak, Inc.	DEATAK MODEL-MCC-3	America



Figure 1. The aerogel microspheres characterisation instrumentation

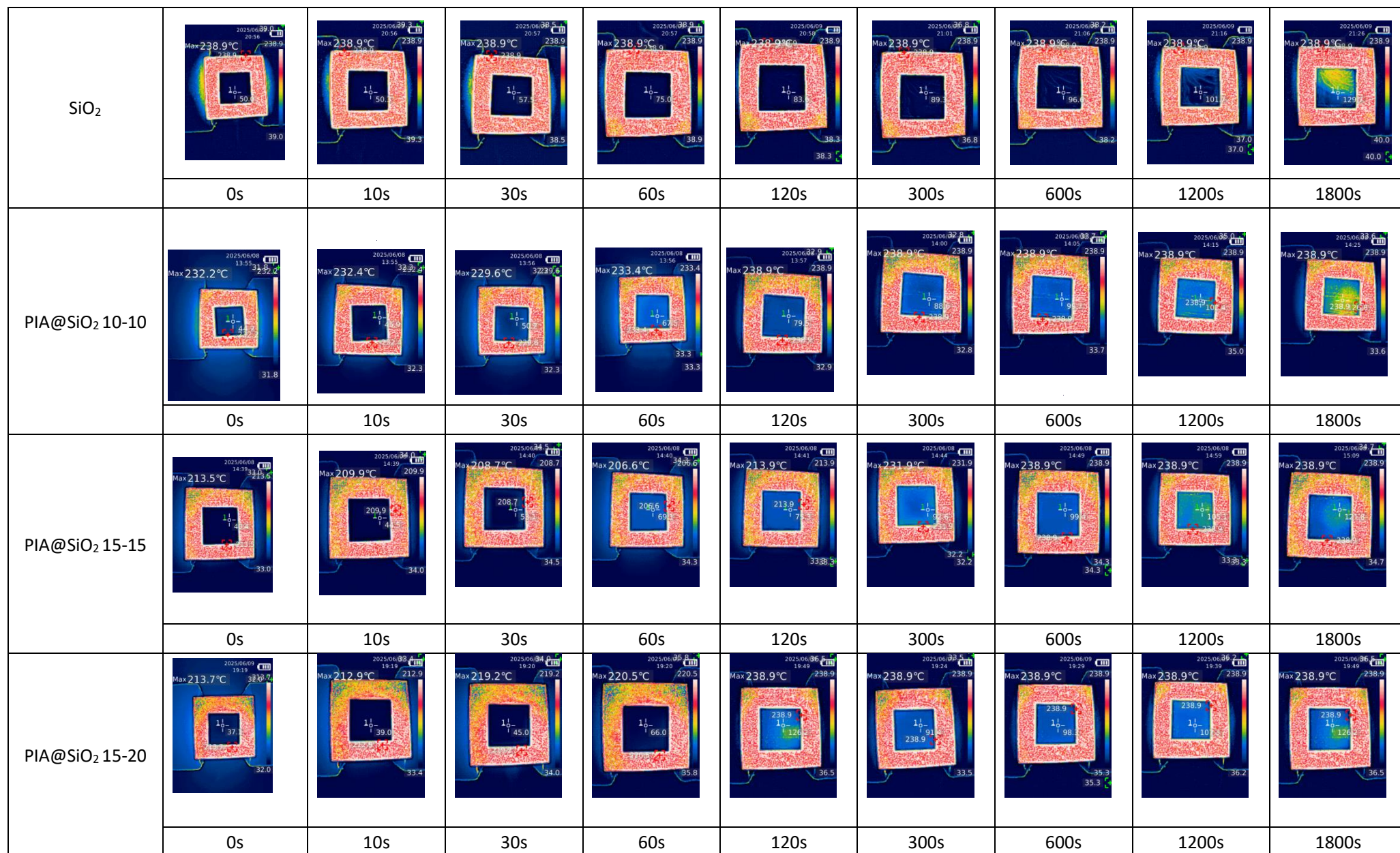


Figure 2 Thermal images of aerogel composite microspheres at various test points