

Effect of Bioactive Glass Application On Staining Susceptibility and Hardness of Bleached Enamel

Thesis

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Dedication

My Mom

*Who supported and inspired me in every possible way and
to whom I owe everything.*

My Husband

My life partner and soulmate who is always there for me.

My Sisters

My support system and backbone.

My Son

My source of joy and hope.

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*Whom I consider a 2nd family, as they have always had my
back whenever I needed help.*

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List of Abbreviations

a*	Green-Red Axis
ACP	Amorphous Calcium Phosphate
AFM	Atomic Force Microscopy
BAG	Bioactive Glasses
b*	Blue-Yellow Axis
CIE	The Commission Internationale De l'Eclariage
CN	Calcium Nitrate
CP	Carbamide Peroxide
CPP	Casein Phosphopeptide
CPP-ACP	Casein Phosphopeptide-Amorphous Calcium Phosphate
DH	Dentin Hypersensitivity
EDX	Energy Dispersive X-Ray Spectroscopy
HA	Hydroxyapatite
HCA	Hydroxyl-Carbonated Apatite
HP	Hydrogen Peroxide
HV₀	Vickers hardness before bleaching procedure
HV₁	Vickers hardness after bleaching procedure
HV₂	Vickers hardness after BAG application
KHN	Knoop Hardness Number
L*	Lightness-Darkness Axis
LED	Light Emitting Diode
Nano-P	Nanohydroxyapatite-Based Agent
N-BAG	Nano-Bioactive Glass
OTC	Over-The-Counter
PACs	Plasma Arc Lamps
PVC	Polyvinyl Chloride

SEM	Scanning Electron Microscope
Si-OH	Silanol
SMH	Surface Microhardness
SR	Surface Roughness
TEOS	Tetraethyl Orthosilicate
UV	Ultraviolet Light Source
VHN	Vickers Hardness Number
XRD	X-Ray Diffraction
Δa	Difference In chroma (Red-Green axis)
ΔE	Color Difference
Δb	Difference In chroma (Yellow-Blue axis)
ΔL	Difference In Lightness

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