

Alireza Sadr DDS, PhD

Current Positions

Clinical Associate Professor and Vice Chair
Director of Operative Dentistry Preclinical Training
Department of Restorative Dentistry
University of Washington School of Dentistry, Seattle, WA

Adjunct Associate Professor

Department of Cariology and Operative Dentistry
Tokyo Medical and Dental University, Tokyo, Japan

Last Updated: Jan 2024

Basic Information

| | | | |
|---------------------|--|-------------------|-------------------------------------|
| First Name | Alireza | Last Name | Sadr |
| Department | Department of Restorative Dentistry | | |
| Institution | University of Washington School of Dentistry | | |
| Present Rank | Clinical Associate Professor – Dental Pathway | | |
| Address | 1959 NE Pacific St. Box 357456 | | |
| Tel | (206) 543-5948 | Department | Sadr Bio |
| Fax | (206) 543-7783 | Laboratory | Sadr Lab - B4T |
| Email | arsadr@uw.edu | Practice | UW Faculty Practice |

Education

| Institution | Degree | Major | Dates | |
|--|--------|----------------|-----------|-----------|
| | | | Start | End |
| Tokyo Medical and Dental University, Tokyo, Japan | PhD | Dental Science | Apr, 2004 | Mar, 2008 |
| National University of Iran (Shahid Beheshti University of Medical Sciences), Tehran, Iran | DDS | Dentistry | Oct, 1996 | Jun, 2003 |

Academic Career Record

| Organization | Department/Section | Position | Dates | |
|--|--|--|-----------|-------------|
| | | | Start | End |
| University of Washington School of Dentistry | Department of Restorative Dentistry | Clinical Associate Professor - Dental Pathway | May, 2020 | ongoing |
| University of Washington School of Dentistry | Department of Restorative Dentistry | Clinical Associate Professor - Salaried | Mar, 2019 | April, 2020 |
| University of Washington School of Dentistry | Department of Restorative Dentistry | Acting Associate Professor | Mar, 2015 | Mar, 2019 |
| Tokyo Medical and Dental University | Graduate School of Medical and Dental Sciences | Adjunct Associate Professor | Apr, 2015 | ongoing |
| Tokyo Medical and Dental University | Global Center of Excellence Program, International Research Center for Molecular Science in Tooth and Bone Diseases, Cariology and Operative Dentistry | Junior Associate Professor, Specially Appointed Faculty and Principal Investigator | Mar, 2009 | Mar, 2015 |
| National University of Iran (SBMU) | Restorative Dentistry | Assistant Professor | Jul, 2008 | Feb, 2009 |
| Tokyo Medical and Dental University | Cariology and Operative Dentistry | Fellow Researcher | Apr, 2008 | Jun, 2008 |

Languages

English (Bilingual proficiency)
 Persian (Native)
 Japanese (Business level)
 Arabic (Basic)

Professional Responsibilities and Service

a) Course Directing/Teaching

| Course Name | Role | Enrollment × quarter(s)/year | Type (half-days/week/quarter) |
|--|----------------|------------------------------|-------------------------------|
| DENTPC 530: Operative Dentistry 1 (Spring) | Director | 64 × 1 | Didactic (1) |
| DENTPC 550: Operative Dentistry 2 (Summer) | Director | 64 × 1 | Didactic & Simulation (3) |
| DENTPC 560: Operative Dentistry 3 (Autumn) | Director | 64 × 1 | Didactic & Simulation (2) |
| DENTPC 570: Operative Dentistry 4 (Winter) | Director | 72 × 1 | Didactic & Simulation (2) |
| DENTPC 580: Operative Dentistry 5 (Spring) | Director | 72 × 1 | Didactic & Simulation (2) |
| DENTCL 634: Operative Dentistry Clerkship (3 rd year) | Attending | 72 × 1 | Didactic & Clinical (2) |
| RESD 662: Introduction to CAD/CAM Dentistry | Director | 10 × 2 | Didactic & Clinical/Lab (1) |
| GP Clinic (4 th year) | Attending | 72 × 4 | Clinical (1) |
| SOD Graduate Programs (Orthodontics, Prosthodontics, Pediatric Dentistry, GPR, OHS, Radiology) | Guest Lecturer | Varies | Varies |

b) Clinical Practice

| License and Rendered Services | Dates Active |
|--|---------------|
| Dentist, Faculty Practice, UW School of Dentistry, Seattle, WA with special focus on restorative dentistry, digital workflow and treatment of fearful patients | 2015– ongoing |
| Dentistry Faculty License (DF60530448, Washington State Department of Health) | 2015– ongoing |
| United States Drug Enforcement Authority License (DEA Schedule II+) | 2015– ongoing |
| Nitrous Oxide Sedation Certificate | 2016– ongoing |
| Basic Life Support for Healthcare Providers Certificate (American Heart Association) | 2015– ongoing |
| IRMC Dentist License | 2003– ongoing |

c) Professional Service

| Administrative and Organizational Leadership | Responsibility | Date (Term) |
|---|----------------------------------|--|
| Internal Roles | | |
| UWSOD Department of Restorative Dentistry | Vice Chair | 2022 – ongoing |
| UWSOD Digital Workflows Taskforce (newly forming) | Chair | 2023 – ongoing |
| UWSOD Strategic Planning Oversight Committee (SPOC) | Lead Technology Workgroup | 2023 – ongoing |
| UWSOD Materials & Instruments Committee | Chair | 2022 – ongoing |
| UWSOD Information & Educational Technology Committee | Chair | 2022 – ongoing 2019 – 2021 (member) |
| UWSOD IDDS Selection Committee | Member | 2017 – ongoing |
| Biomimetics Biomaterials Biophotonics Biomechanics & Technology (B4T) Research Labs | Associate Director | 2015 – ongoing |
| UWSOD Admissions | Interviewer | 2017 – ongoing |
| Research Advisory Committee, UW School of Dentistry | Committee Member | 2015 – 2018 |
| OKU National Dental Honor Society Sigma Sigma Chapter at UWSOD | President | 2022 – ongoing |
| External Organizations | | |
| The International Academy for Adhesive Dentistry (IAAD) | President Board Member | 2023 – 2025 term 2013 – 2023 |
| State-of-the-art Adhesive Dentistry International Symposium, Seattle, WA | Organizer and Chair | Summer 2022 |
| The 2022 International Academy for Adhesive Dentistry Meeting, Campinas, Brazil | Organizer and Co-Chair | Nov 2021 |

| | | |
|--|---|------------------------------------|
| UW-IAAD Online Webinar Series on Adhesive Dentistry (8 days) | Organizer and Chair | Summer 2020 |
| Academy of Operative Dentistry, Consortium of Operative Dentistry Educators (CODE) | UW representative | 2018, 2019, 2020, 2021, 2022, 2023 |
| The 2019 International Congress on Adhesive Dentistry, Seattle, WA | Organizer and Co-Chair | June, 2019 |
| “Adhesive Luting Materials”, 47th General Meeting of AADR, Fort Lauderdale, FL, USA | Session Chair | March, 2018 |
| “Composite Repair and Shrinkage”, 95th General Meeting of IADR, San Francisco, CA, USA | Session Chair | March, 2017 |
| The International Academy for Adhesive Dentistry (IAAD) | Board Member Secretary General 2019-2021 President Elect 2024-2025 | 2013 – ongoing |
| IADR Satellite Symposium “Antibacterial and Bioactive Dental Restorative Materials: Do They Really Work?” Seoul, Korea | Symposium Co-organizer and Co-chair | June, 2016 |
| Tokyo Medical and Dental University International Exchange Center Committee | Committee Member | 2014 – 2015 |
| First International Symposium on Optical Coherence Tomography in Dentistry, Tokyo, Japan | Symposium Organizer, Session Chair | June, 2013 |
| The 7th Global COE International Symposium, Tokyo, Japan | NIDCR Director Session Organizer | November, 2012 |
| 132nd Meeting of the Japanese Society for Conservative Dentistry (JSCD), Kumamoto, Japan | Speakers Coordinator Conference Book Editor | June, 2010 |
| 29th Global COE Seminar at TMDU, Tokyo, Japan | Session Organizer, Moderator | June, 2010 |
| Oral Presentation Session “Imaging Modalities in Dentistry”, 87th General Meeting of IADR, Miami, FL, USA | Session Chair | April, 2009 |
| 2nd Annual Conference of ASIJ, Tokyo, Japan | Organizing Committee Head | February, 2007 |
| 6th International Congress of Iranian Endodontist Association, Tehran, Iran | Registration Organizer | August, 2002 |

d) Memberships to Professional Organizations

| Organization | Term |
|---|---------------|
| International Association for Dental Research (IADR) Dental Materials and Cariology Groups | 2003– ongoing |
| American Association for Dental, Oral, and Craniofacial Research (AADOCR) | 2015– ongoing |
| Optical Society of America (OSA) | 2010– ongoing |
| International Academy for Adhesive Dentistry (IAAD) | 2013– ongoing |
| American Dental Association (ADA) | 2015– ongoing |
| Washington State Dental Association (WSDA) | 2015– ongoing |
| Seattle-King County Dental Society (SKCDS) | 2015– ongoing |
| Academy of Biomimetic Dentistry (ABD) | 2015– ongoing |
| Academy of Operative Dentistry (AOD) | 2012– ongoing |

e) Volunteer Clinical Service

| Organization | Dates |
|--|-----------------------------|
| Medical Teams International Faculty Preceptor, Seattle, WA | Autumn 2022 (multiple days) |
| COVID-19 Vaccination Camp Faculty Preceptor, King Country, WA | Summer 2021 (multiple days) |
| Special Smiles Attending Dentist, 2018 Special Olympics USA Games, Seattle, WA | July 1-6, 2018 |
| Attending Dentist, Seattle/King County Clinic, Seattle, WA | 2015– 2018 (multiple days) |
| Clinical Supervisor, UW Community Dental Clinic, Longview, WA | 2015- 2017 (multiple days) |

f) Scholarly Service

[Sadr, Alireza - Web of Science Core Collection](#) Verified Peer Review Records

Research, Mentorship and Awards

a) Competitive research grants

| Granting Agency | Project Title | Total Amount (USD) | Fiscal Year | | PI Co-Investigator (other roles) |
|--|---|--|-------------|---------|---|
| | | | Start | End | |
| NIH NIDCR Fast Track SBIR 2023 | Oral biofilm mapping with fluorescein for early detection and prevention of tooth decay | \$1,000,000 <i>(scored favorably, under review)</i> | | | VerAvanti Eric Seibel Alireza Sadr |
| NIH Small Business Innovative Research (SBIR) 1R44DE031194 | Next generation MEMS-VCSEL technology for ultra-low-cost dental and periodontal swept source optical coherence tomography imaging | \$275,001 Phase I <i>awarded</i> <i>Requested \$2,000,000</i> | 2022 | ongoing | PRAEVIUM Research Inc. Ricky Wang Alireza Sadr |
| National Science Foundation PFI:BIC #1631146 | Smart Laser-Based Imaging and Optical Spectroscopy System: optical quantification of bacterial load, oral health surveillance, and caries prediction. | \$1,094,253 (funded) | 2016 | 2020 | Eric Seibel Sean Munson (Alireza Sadr) |
| UWSOD Douglass L. Morell Research Fund | Fatigue Resistance of Bonded All-Ceramic Crowns with Different Axial Wall Height and Total Occlusal Convergence. | \$5,000 (funded) | 2018 | 2019 | Yen-Wei Chen Alireza Sadr |
| American Academy of Fixed Prosthodontics Tylman Grant | Microgap, Polymerization Shrinkage and Aging Stability of Resin Cements on Zirconia, Lithium Disilicate and Composite Resin Veneers By MicroCT and OCT Analysis | \$4,000 (funded) | 2018 | 2019 | Alireza Sadr Servando Ramos Pi-Yu Hsu (Prosthodontics Graduate Student) |
| NIH National Institute of Dental and Craniofacial Research (NIDCR Category R21 No. 1R21DE025356-01A1) | Multispectral Near-infrared Imaging of Dental Caries in Children | \$270,375 (funded) | 2016 | 2018 | Eric J Seibel Joel Berg Alireza Sadr |
| Dental Trade Alliance Foundation (Grant No. 16-087) | Utility of Optical Coherence Tomography as Alternative to Dental X-Rays | \$25,000 (funded) | 2016 | 2018 | Alireza Sadr Kimberly Espinoza |
| Japan Society for Promotion of Science (Category C Kaken No. 16K11543) | μ CT-3D visualization method for analysis and countermeasure of polymerization shrinkage behavior of resin | \$39,000 (funded) | 2017 | 2019 | Takako Yoshikawa (TMDU) Alireza Sadr |
| Japan Society for Promotion of Science (Category C Kaken No. 15K11107) | Monitoring interfacial sealing and development of caries around composites by OCT | \$34,000 (funded) | 2015 | 2018 | Alireza Sadr John A. Sorensen (Consultant) |
| Japan Society for Promotion of Science (Exploratory and Challenging Research Category No. 26560234) | Determination of atomic arrangement of elements in human dental hard tissue by 3D Atom Probe Tomography | \$36,000 (funded) | 2014 | 2016 | Yasuo Shimizu (Tohoku University) Alireza Sadr |
| Japan Society for Promotion of Science (Category C Kaken No. 25462946) | OCT randomized clinical trials on the effectiveness of chewing gum containing Ca and F on remineralization of hypomineralized enamel lesions | \$50,000 (funded) | 2013 | 2016 | Yuichi Kitasako (TMDU) Alireza Sadr |
| Japan Society for Promotion of Science (Category C Kaken No. 22592115) | Analysis of shrinkage vectors in dental composite by micro-CT filler tracing | \$39,000 (funded) | 2013 | 2016 | Takako Yoshikawa (TMDU) Alireza Sadr (Co-PI) |
| Global COE Program (IRCMSTBD FYH24) | Characterization of enamel lesion surface layer through refractive index | \$11,000 (funded) | 2012 | 2013 | Alireza Sadr |
| Japan Society for Promotion of Science (Young investigator B Kaken No. 24792019) | Non-destructive 3D evaluation of sealing of resin-based restorations | \$39,000 (funded) | 2012 | 2015 | Alireza Sadr |

| | | | | | |
|---|--|--------------------|------|------|---|
| Global COE Program (IRCMSTBD FYH23) | Effects of low levels of fluoride enhance remineralization of early enamel lesions by soluble calcium compounds in vitro | \$11,000 (funded) | 2011 | 2012 | Alireza Sadr |
| Japan Society for Promotion of Science (Category C Kaken No. 24592861) | Assessment of hidden caries by optical coherence tomography | \$57,000 (funded) | 2012 | 2015 | Yasushi Shimada (TMDU) Alireza Sadr |
| Japan Society for Promotion of Science (Young investigator B Kaken No. 22791924) | Relationship between Mechanical Properties, Mineral Phase and Reflectivity of Healthy and Carious Enamel and Dentin | \$21,800 (funded) | 2010 | 2012 | Alireza Sadr |
| Global COE Program (IRCMSTBD FYH22) | Early Diagnosis of Dental Caries by Optical Coherence Tomography | \$11,000 (funded) | 2010 | 2011 | Alireza Sadr |
| Japanese Ministry of Health, Labor and Welfare (Grant No. 21-A) | Development of new equipment with near-infrared laser light for diagnosis and treatment of dental diseases | \$200,000 (funded) | 2010 | 2014 | Yasunori Sumi (Japan National Center for Geriatrics) Junji Tagami Alireza Sadr |
| Global COE Program (IRCMSTBD startup) | Reinforcement of Human Enamel and Dentin against Acid-attack by Self-etch Monomers | \$20,000 (funded) | 2009 | 2010 | Alireza Sadr |

b) Sponsored Research Contracts

| Sponsor | Project Title | Amount (USD) Other support | Fiscal Year | | PI Co-Investigator (other roles) |
|--|--|-------------------------------|-------------|------|--|
| | | | Start | End | |
| Dentsply Sirona, Charlotte, NC | SS-OCT Assessment of Composite Placement Techniques | \$50,000 | 2023 | 2025 | Alireza Sadr Alan Atlas (U Penn) |
| CAO Group, West Jordan, UT | Evaluation of the Performance of a Novel Laser Light-curing Unit in Polymerization Shrinkage and Degree of Conversion in Deep Preparations | \$15,000 | 2022 | 2023 | Alireza Sadr |
| Zest Dental Solutions, Carlsbad, CA | OCT Evaluation of Improved dual-cured bulk fill composite in deep cavity | \$15,000 | 2022 | 2023 | Alireza Sadr |
| Yoshida Dental Mfg. Co., Tokyo, Japan | Yoshida Dental OCT Development Project, Equipment loan and research agreement | \$300,000 | 2018 | 2022 | Alireza Sadr John Sorensen Juri Hayashi |
| Kuraray Noritake Dental Inc., Tokyo, Japan | Evaluation of bond strength of the new Panavia cement (UW service contract) | \$20,000 | 2019 | 2021 | Alireza Sadr |
| Ivoclar Vivadent AG, Schaan, Liechtenstein | Performance of bulkfill composites in deep cavities (UW eGC1 #A130993) | \$20,000 | 2018 | 2019 | Alireza Sadr |
| Ivoclar Vivadent US, Amherst, NY | Clinical trial on the longevity of adhesively cemented single tooth CAD/CAM lithium disilicate restorations using a fully di | \$70,000 | 2016 | 2020 | John Sorensen Alireza Sadr Yen-Wei Chen |
| Ribbon Inc., Seattle, WA | Fatigue Loading of Structurally Compromised Teeth Restored with Plasma-treated Leno-weaved Polyethylene Fiber Resin Composite (UW eGC1 #A128570) | \$25,000 | 2017 | 2019 | Alireza Sadr Yen-Wei Chen |
| Parkell, Inc., New York, NY | Characterization of Bioactive Dentin Desensitizer (UW eGC1 #A131053) | \$20,000 | 2017 | 2018 | Alireza Sadr |
| Kuraray Noritake Dental Inc., Tokyo, Japan | Bond strength of newly developed adhesives to enamel and dentin (UW eGC1 #A116141) | \$20,000 | 2016 | 2018 | Alireza Sadr |
| Danville Materials, Oakland, CA | Performance of a novel dual-cured bulk fill composite in bonding to cavity floor under high C-factor (UW eGC1 #AA117242) | \$20,000 | 2016 | 2018 | Alireza Sadr |
| Ribbon, Seattle, WA | Effect of PTPF woven fiber on shrinkage stress control (UW eGC1 grant #A105918) | \$10,000 | 2015 | 2017 | Alireza Sadr |
| Horiba, Tokyo, Japan | Application of an optical instrument for mineral content measurement on tooth surface | — | 2014 | 2020 | Alireza Sadr (Patent co-owner) |

| | | | | | |
|---------------------------------------|---|-----------|------|------|--|
| Dentsply Sankin, Tokyo, Japan | Evaluation of new bulk fill flowable resins composite | \$30,000 | 2010 | 2012 | Junji Tagami (TMDU) Alireza Sadr (Co-PI) |
| Ezaki Glico, Osaka, Japan | Development and laboratory and clinical evaluation of chewing gum and other products containing Ca, P and F (POs-Ca) | \$50,000 | 2010 | 2014 | Junji Tagami (TMDU) Yuichi Kitasako (Co-PI) Alireza Sadr |
| Panasonic Health Care, Shikoku, Japan | Development of Panasonic Dental SS-OCT laser-based imaging hardware for research and diagnostic clinical applications | \$150,000 | 2009 | 2013 | Junji Tagami (TMDU) Yasushi Shimada Alireza Sadr |

c) Students/Researcher Supervised or Co-supervised (Selected list)

| Student | Degree/ Title | Program/ Department (project short title) | Degree/ Project Status | Institution | Role | Project Dates | |
|-----------------------------|----------------|--|------------------------|--|-----------------------------|---------------|-----------|
| | | | | | | Start | End |
| Hiroshi Okada DDS | PhD | Cariology and Operative Dentistry (restoration of root lesions, bonding to cementum) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2005 | Mar, 2009 |
| Shenghua Wei DDS | PhD | Cariology and Operative Dentistry (Caries-affected dentin as adhesion substrate) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2006 | Mar, 2010 |
| Mie Fujii DDS | PhD | Cariology and Operative Dentistry (Surface pH of enamel lesions) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2007 | Mar, 2011 |
| Patricia Makishi DDS | PhD | Cariology and Operative Dentistry (Interfacial assessment of restorations) | Completed | Tokyo Medical and Dental University | Co-supervisor | Apr, 2007 | Mar, 2011 |
| Hidenori Hamba DDS | PhD | Cariology and Operative Dentistry (Micro CT evaluation of enamel) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2008 | Mar, 2012 |
| Shila Emamieh DDS | MSc (external) | Operative Dentistry (Technique sensitivity of adhesives) | Completed | Shahid Beheshti University of Medical Sciences | Co-supervisor | Apr, 2008 | Mar, 2011 |
| Megumi Kuribayashi DDS | PhD | Cariology and Operative Dentistry (Lesion pH vs. cariogenic species) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2009 | Mar, 2013 |
| Ilnaz Hariri DDS | PhD | Cariology and Operative Dentistry (Optical characterization of tissues) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Oct, 2008 | Sep, 2012 |
| Turki A Bakhsh DDS | PhD | Cariology and Operative Dentistry (Optical analysis of tooth and restoration defects) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Apr, 2009 | Mar, 2013 |
| Mona Mandurah DDS | PhD | Cariology and Operative Dentistry (Remineralization monitoring) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Oct, 2009 | Sep, 2013 |
| Gerardo Joves DDS | PhD | Cariology and Operative Dentistry (Caries-affected dentin model) | Completed | Tokyo Medical and Dental University | Co-supervisor | Apr, 2010 | Mar, 2014 |
| Kanako Imai DDS | PhD | Cariology and Operative Dentistry (Enamel crack detection) | Completed | Tokyo Medical and Dental University | Co-supervisor | Apr, 2009 | Mar, 2013 |
| Nariaki Yoshimine DDS | PhD | Cariology and Operative Dentistry (Composite adaptation prior to light-curing) | Completed | Tokyo Medical and Dental University | Co-supervisor | Apr, 2011 | Mar, 2015 |
| Ikumi Wada DDS | PhD | Cariology and Operative Dentistry (Cervical lesion characters) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2011 | Mar, 2015 |
| Ornnicha Thanatvarakorn DDS | PhD | Cariology and Operative Dentistry (Inorganic dentin desensitizer) | Completed | Tokyo Medical and Dental University | Research project consultant | Oct, 2011 | Sep, 2015 |

| | | | | | | | |
|---------------------------|---------------------------|---|-----------|-------------------------------------|-----------------------------|------------|-----------|
| Alaa Turkistani DDS | PhD | Cariology and Operative Dentistry (Progress of Caries around restoration) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Oct, 2011 | Sep, 2015 |
| Ehab Z Alsayed DDS | PhD | Cariology and Operative Dentistry (Enamel protection by resin) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Apr, 2012 | Mar, 2016 |
| Marjan Behroozibakhsh DDS | PhD (external) | Dental Biomaterials (Nanohydroxy apatite) | Completed | Tehran University | Research project consultant | Oct, 2008 | Sep, 2012 |
| Hossein Bagheri DDS | PhD (external) | Dental Biomaterials (LRAP proteins) | Completed | Tehran University | Co-supervisor | Jan, 2014 | Mar, 2014 |
| Amir Nazari DDS | PhD | Cariology and Operative Dentistry (Optical detection of structural defects) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Oct, 2008 | Sep, 2012 |
| Hisaichi Nakagawa DDS | DDS-PhD program | Cariology and Operative Dentistry (Smooth surface caries detection) | Completed | Tokyo Medical and Dental University | Co-supervisor | Apr, 2010 | Mar, 2013 |
| Hamid Nurrohman DDS | PhD | Cariology and Operative Dentistry (Resin-dentin interface durability) | Completed | Tokyo Medical and Dental University | Research project consultant | Oct, 2008 | Sep, 2012 |
| Ahmed Jamleh DDS | PhD | Endodontics (Nanoindentation of NiTi files) | Completed | Tokyo Medical and Dental University | Research project consultant | Apr, 2009 | Mar, 2013 |
| Seung Hoon Han DDS | PhD (external) | Operative dentistry (Restoration durability) | Completed | Seoul Yonsei University | Research project consultant | Apr, 2010 | Mar, 2014 |
| Yuko Natsume DDS | PhD | Cariology and Operative Dentistry (Dentin caries diagnosis by OCT) | Completed | Tokyo Medical and Dental University | Co-supervisor | Apr, 2008 | Mar, 2012 |
| Baba Bista BDS | PhD | Cariology and Operative Dentistry (Composite restoration assessment) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Apr, 2012 | Mar, 2016 |
| Jorge Espigares BDS | PhD | Cariology and Operative Dentistry (Lesion remineralization potential) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Apr, 2013 | Mar, 2017 |
| Patrycja Majkut DDS | PhD | Cariology and Operative Dentistry (Clinical evaluation of RDT) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Apr, 2013 | Mar, 2017 |
| Juri Hayashi DDS | PhD | Cariology and Operative Dentistry (Real-time imaging of gap formation) | Completed | Tokyo Medical and Dental University | Primary Supervisor | Apr, 2013 | Mar, 2017 |
| Paul Lutgen | DDS Class 2019 | Summer Undergraduate Research Fellowship (UW SURF: Effect of silver diamine fluoride on bonding) | Completed | University of Washington | Primary Supervisor | Jan, 2016 | Jul, 2019 |
| Xiaoping Hu DDS | Visiting scholar | Restorative Dentistry (Experimental universal adhesive) | Completed | University of Washington | Primary Supervisor | July, 2015 | Jun, 2016 |
| Behnoush Bakhtiari DDS | Research volunteer | Restorative Dentistry (Fiber-reinforced bulk-filled composite) | Completed | University of Washington | Primary Supervisor | Jan, 2016 | Dec, 2016 |
| Mark Van Duker | DDS Class 2020 | Summer Undergraduate Research Fellowship (UW SURF: Effect of SDF and KI on bonding to carious dentin) | Completed | University of Washington | Primary Supervisor | Jan, 2017 | Dec, 2017 |
| Vernon Zander | DDS Class 2020 | Summer Undergraduate Research Fellowship (UW SURF: Effect of SDF and KI on dentin acid resistance) | Completed | University of Washington | Primary Supervisor | Jan, 2017 | Dec, 2017 |
| Natasha Paranjapye | Pre-Dental DDS Class 2022 | Restorative Dentistry (Scanning Electron Microscopy of Interfaces) | Completed | University of Washington | Primary Supervisor | Jan, 2017 | Dec, 2017 |
| Ayane Horike | DDS | TMDU Exchange Research Student (Durability of bonding to zirconia) | Completed | University of Washington | Primary Supervisor | Apr, 2017 | Sep, 2017 |
| Nozomi Ogata | DDS | TMDU Exchange Research Student (uCT Analysis of Natural Caries) | Completed | University of Washington | Primary Supervisor | May, 2017 | Sep, 2017 |

| | | | | | | | |
|-------------------------|----------------------------|--|-----------|--------------------------|--------------------|------------|-----------|
| Nousha Panahpour Eslami | DDS Class 2021 | Summer Undergraduate Research Fellowship (UW SURF: remineralization of carious dentin with GI and SDF) | Completed | University of Washington | Primary Supervisor | Jan, 2018 | Dec, 2018 |
| Philip A. Walczak | DDS PhD Program Class 2021 | Summer Undergraduate Research Fellowship (UW SURF: <i>in vivo</i> monitoring of plaque pH) | Completed | University of Washington | Co-supervisor | Jan, 2018 | Dec, 2018 |
| Asher Chiu | DDS Class 2021 | Summer Undergraduate Research Fellowship (UW SURF: accuracy of CAD/CAM scanning approaches) | Completed | University of Washington | Co-supervisor | Jan, 2018 | Dec, 2018 |
| Robert Lee DDS PhD | MSc | Graduate Orthodontics Research Project (NIR imaging of enamel caries) | Completed | University of Washington | Co-supervisor | Jan, 2017 | Jul, 2019 |
| Pi-Yu Hsu DDS | MSc | Graduate Prosthodontics Research Project (uCT analysis of zirconia and lithium disilicate veneers) | Completed | University of Washington | Primary Supervisor | Jan, 2017 | Jul, 2019 |
| Juri Hayashi DDS PhD | Visiting scholar | Restorative Dentistry (OCT analysis on restorative materials) | Completed | University of Washington | Supervisor | Apr, 2018 | Mar, 2020 |
| Minh Luong DDS PhD | Visiting scholar | Restorative Dentistry (OCT analysis on dental tissue) | Completed | University of Washington | Supervisor | Sep, 2018 | Aug, 2020 |
| Philip A. Walczak | DDS PhD Program Class 2021 | Fellowship for Academic Careers in Oral Health (Digital dentistry for pre-clinical training) | Completed | University of Washington | Supervisor | Jun, 2020 | Apr, 2021 |
| Daniel Hovander | DDS Class 2023 | Summer Undergraduate Research Fellowship (UW SURF: dentin crack analysis and treatment) | Completed | University of Washington | Supervisor | Jan, 2020 | Dec, 2020 |
| Diala Sellk | DDS Class 2024 | Summer Undergraduate Research Fellowship (UW SURF: Bonding of RMGI to SDF/SDFKI treated dentin) | Completed | University of Washington | Supervisor | Jan, 2021 | Dec, 2021 |
| Sanaz Saadat | Graduate Student | UW Department of Restorative Dentistry/PhD Program | Expected | University of Washington | Supervisor | Sep 2020 | Mar, 2024 |
| Samar Haghghi | DDS Class 2022 | 4th Year Research Track Fellowship (Evaluation of Laser Curing Light) | Completed | University of Washington | Supervisor | Jan, 2021 | Dec, 2021 |
| Mike Feiz | DDS Class 2022 | B4T Research Student (Evaluation of MSBS of new cement to ceramics) | Completed | University of Washington | Supervisor | Jan, 2021 | Dec, 2021 |
| Juman Al-Haddad | DDS Class 2025 | Summer Undergraduate Research Fellowship (UW SURF: Bonding of bulkfill composites to deep dentin) | Expected | University of Washington | Supervisor | Jan, 2022 | Dec, 2022 |
| Seoyoun Hahn | MSc | Graduate Prosthodontics Research Project (MicroCT Imaging of Implants under Cyclic Fatigue Load) | Expected | University of Washington | Co-supervisor | June, 2023 | Jul, 2024 |

d) Academic Awards and Honors*

| Name | Type | Presenter | Date |
|--|-------------------------------------|---|-----------|
| UW Rothwell Teaching Award | Faculty Teaching Award | University of Washington | Sep, 2023 |
| UW School of Dentistry White Coat Ceremony Presenter | Faculty Honor | Second Year Students Class of 2025 | Aug, 2023 |
| IADR Bayne Award | International Research Career Award | International Association for Dental Research, Dental Materials Group | Jun, 2022 |
| UW School of Dentistry Faculty Award | Faculty Teaching Award | Selected Faculty of the Year Class of 2023 | Jun, 2021 |
| UW School of Dentistry Faculty Award | Faculty Teaching Award | Selected Faculty of the Year Class of 2022 | Jun, 2020 |
| OKU Faculty Membership | Honorary Membership | Omicron Kappa Upsilon National Dental Honor Society Sigma Sigma Chapter | Jun, 2020 |
| ABD Honorary Fellow | Honorary Fellowship | Academy of Biomimetic Dentistry | Jun, 2019 |

| | | | |
|---|--|--|-----------------------|
| UW School of Dentistry Faculty Award and White Coat Ceremony Keynote Speaker | Faculty Teaching Award | Selected Faculty of the Year Class of 2021 | Jun, 2019 |
| Outstanding Research in Adhesive Dentistry, First Place | Research Presentation Award | International Congress on Adhesive Dentistry (Philadelphia, PA) | Jun, 2013 |
| JSAD Distinguished Researcher Award | Research Presentation Award | Japan Society for Adhesive Dentistry Annual Research Award (Tokyo) | Dec, 2012 |
| Outstanding Research in Adhesive Dentistry, First Place | Research Presentation Award | International Congress on Adhesive Dentistry (Seoul) | May, 2011 |
| Monbukagakusho Scholarship for Graduate Studies | Competitive Full-tuition and Stipend Scholarship | Government of Japan, Ministry of Education CS Science and Technology | Oct, 2003 - Mar, 2008 |
| Kobayashi Prize for Excellence in Post-Graduate Research (First Place) | Competitive Student Grant | Kobayashi Foundation (Tokyo) | Oct, 2007 |
| * My mentees have won competitive scholarships and research awards for the projects they completed with me (list available upon request). | | | |

Publications and Other Scholarly Output

a) Selected Peer-reviewed Full-length Publications

(*) indicates lead and/or corresponding author.

Google Scholar Citations as of Jul 2023:8686; h-index: 53; i10-index 179. Citation metrics at <http://bit.ly/alirezasadr>

1. Sadr A*, Margalit O, Palander A, Tagami J. Bulk Fill Composites: Adhesion and Interfacial Adaptation. Chapter in **Bulk Fill Resin Composites in Dentistry: A Clinical Guide**. Editors: Sabbagh J, McConnell R. Springer 2023 (in press).
2. Effect of Attenuated Light Through Translucent Zirconia on the Interfacial Adaptation and Polymerization of Resin Cements.
3. Han SH, Shimada Y, Sadr A, Tabata T, Nakagawa H, Sato T, Byun JE, Park SH. **J Adhes Dent**. 2023 8;25(1):219-230.
4. Shekofteh K, Kashi TJ, Behroozibakhsh M, Sadr A, Najafi F, Bagheri H. Evaluation of physical/mechanical properties of an experimental dental composite modified with a zirconium-based metal-organic framework (MOF) as an innovative dental filler. **Dent Mater**. (in press)
5. Arshad M, Hassantash S, Chinian S, Sadr A, Habibzadeh S. Fracture strength and three-dimensional marginal evaluation of biocompatible high-performance polymer versus pressed lithium disilicate crowns. **J Prosthet Dent**. 2023;130(1):132.
6. Luong M, Sadr A, Chan DCN. Dentin Discoloration and Pulpal Ion Concentrations Following Silver Diamine Fluoride and Potassium Iodide Treatment. **Oper Dent**. 2022;47(6):640-647.
7. Chen X, Inoue G, Ikeda M, Sadr A, Shimada Y. Time-dependent structural changes and hypermineralisation of artificially demineralised dentine following treatment with silver diammine fluoride and glass ionomer cement. **J Dent**. 2023;131:104452.
8. Han SH, Shimada Y, Sadr A, Tagami J, Tabata T, Nakagawa H, Yang SE. Effects of Material Thickness and Pretreatment on the Interfacial Gap of Translucent Zirconia Restorations with Self-adhesive Resin Cement. **Oper Dent**. 2022;47(5):535-548.
9. Hovander D, Chyz G, Shimada Y, Tagami J, Sadr A*. Optical coherence tomography evaluation of deep dentin crack removal techniques. **JADA Foundational Science**. 2022;1:100012.
10. Islam MS, Aal-Fatlah AA, Alkhan NS, Aryal Ac S, Sadr A, Rehman MM. The effect of different finishing polishing protocols on stain absorption and color stability of resin composite restorations. **Am J Dent**. 2022;35(2):141-145.
11. Hage D, Iwanaga J, Danaei A, Sadr A, Tubbs RS. Accessory anterior ethmoidal nerve and artery: a cadaveric case report. **Folia Morphol (Warsz)**. (in press).
12. Sharma M, Lee LK, Carson MD, Park DS, An SW, Bovenkamp MG, Cayetano JJ, Berude IA, Xu Z, Sadr A, Patel SN, Seibel EJ. O-pH: Optical pH Monitor to Measure Oral Biofilm Acidity and Assist in Enamel Health Monitoring. **IEEE Trans Biomed Eng**. 2022 Feb 23 (in press).
13. Shahabi S, Sayyari M, Sadrai S, Valizadeh S, Hajizamani H, Sadr A. Effect of Volume and Renewal of the Storage Media on the Release of Monomer from Dental Composites. **Int J Dent**. 2021;2021:9769947.

14. Espinoza K, Hayashi J, Shimada Y, Tagami J, [Sadr A*](#). Optical Coherence Tomography for Patients with Developmental Disabilities: A Preliminary Study. **Sensors** (Basel). 2021 Nov 28;21(23):7940.
15. Zhou Y, Matin K, Shimada Y, [Sadr A](#), Wang G, Tagami J, Feng X. Characteristics of biofilm-induced degradation at resin-dentin interfaces using multiple combinations of adhesives and resins. **Dent Mater**. 2021 Aug;37(8):1260-1272.
16. Matsuzaki K, Shimada Y, Shinno Y, Ono S, Yamaji K, Ohara N, [Sadr A](#), Sumi Y, Tagami J, Yoshiyama M. Assessment of Demineralization Inhibition Effects of Dentin Desensitizers Using Swept-Source Optical Coherence Tomography. **Materials** (Basel). 2021 Apr 9;14(8):1876.
17. Alsandi Q, Ikeda M, Arisaka Y, Nikaido T, Tsuchida Y, [Sadr A](#), Yui N, Tagami J. Evaluation of Mechanical and Physical Properties of Light and Heat Polymerized UDMA for DLP 3D Printer. **Sensors** (Basel). 2021 May 11;21(10):3331.
18. Chin A, Ikeda M, Takagaki T, Nikaido T, [Sadr A](#), Shimada Y, Tagami J. Effects of Immediate and Delayed Cementations for CAD/CAM Resin Block after Alumina Air Abrasion on Adhesion to Newly Developed Resin Cement. **Materials** (Basel). 2021 Nov 21;14(22):7058.
19. [Sadr A*](#), Bakhtiari B, Hayashi J, Luong MN, Chen YW, Chyz G, Chan DC, Tagami J. Effects of Fiber Reinforcement on Adaptation and Bond Strength of a Bulk-fill Composite in Deep Preparations. **Dent Mater**. 2020;36(4):527-534.
20. Hayashi J, Tagami J, Chan D, [Sadr A*](#). New bulk-fill composite system with high irradiance light polymerization: Integrity and degree of conversion. **Dent Mater**. 2020 Dec;36(12):1615-1623.
21. Turkistani A, Nasir A, Merdad Y, Jamleh A, Alshouibi E, [Sadr A](#), Tagami J, Bakhsh TA. Evaluation of microleakage in class-II bulk-fill composite restorations. **J Dent Sci**. 2020 Dec;15(4):486-492. doi: 10.1016/j.jds.2020.04.007.
22. Han SH, Shimada Y, [Sadr A](#), Tagami J, Kum KY, Park SH. Effect of Pretreatment and Activation Mode on the Interfacial Adaptation of Nanoceramic Resin Inlay and Self-adhesive Resin Cement. **Dent Mater**. 2020;36(9):1170-1182.
23. Panahpour Eslami N, Chan DCN, [Sadr A*](#). Effect of silver diammine fluoride and glass ionomer on remineralisation of natural dentine caries. **J Dent**. 2021 Mar;106:103583.
24. Zhou Y, Matin K, Shimada Y, Wang G, [Sadr A](#), Tagami J. Detection and analysis of early degradation at resin-dentin interface by optical coherence tomography (OCT) and confocal laser scanning microscope (CLSM). **J Dent**. (in press)
25. Luong MN, Huang L, Chan DCN, [Sadr A*](#). In Vitro Study on the Effect of a New Bioactive Desensitizer on Dentin Tubule Sealing and Bonding. **J Funct Biomater**. 2020;11(2):E38.
26. Luong MN, Shimada Y, Araki K, Yoshiyama M, Tagami J, [Sadr A*](#). Diagnosis of Occlusal Caries with Dynamic Slicing of 3D Optical Coherence Tomography Images. **Sensors** (Basel) 2020;20:1659.
27. Hsu P, Ramos V Jr, [Sadr A*](#). Microcomputed tomography evaluation of cement shrinkage under zirconia versus lithium disilicate veneers. **J Prosthet Dent** (in press).
28. Nurrohman H, Habelitz S, Saeki K, [Sadr A](#), Gower LB, Pazdernik V, Tagami J, Marshall SJ, Marshall GW. Enhanced silver diamine fluoride therapy using the PILP method -A nanoindentation study. **Dent Mater J** (in press).
29. Chiu A, Chen YW, Hayashi J, [Sadr A](#). Accuracy of CAD/CAM Digital Impressions with Different Intraoral Scanner Parameters. **Sensors** (Basel). 2020;20: 1157.
30. Zhou Y, Lee RC, Finkleman C, [Sadr A](#), Seibel E. Near-infrared multispectral endoscopic imaging of deep artificial interproximal lesions in extracted teeth. **Lasers Med Sci** (in press).
31. Bakhsh TA, [Sadr A](#), Shimada Y, Turkistani A, Abuljadayel R, Tagami J. Does lining class-II cavities with flowable composite improve the interfacial adaptation? **J Adhes Sci Technol** (in press).
32. Bakhsh TA, Tagami J, [Sadr A](#), Luong MN, Turkistani A, Almhimeed Y, Alshouibi E. Effect of Light Irradiation Condition on Gap Formation Under Polymeric Dental Restoration; OCT study. **Z Med Phys** (in press).
33. Zhou Y, Yoo P, Feng Y, Sankar Aditya, [Sadr A](#), Seibel E. Towards AR-assisted Visualization and Guidance for Imaging of Dental Decay. **Healthcare Technol Lett** (in press).
34. Hu X, Luong MN, Zhang H, Zhu H, Chan DCN, [Sadr A*](#). Influence of phosphoric acid etching on the dentin bond durability of universal adhesives. **J Adhes Sci Technol** 2019;33:2356-2368.
35. Alsandi Q, Ikeda M, Nikaido T, Tsuchida Y, [Sadr A](#), Yui N, Suzuki T, Tagami J. Evaluation of mechanical properties of new elastomer material applicable for dental 3D printer. **J Mech Behav Biomed Mater** 2019;100:103390.
36. Alshahni RZ, Shimada Y, Zhou Y, Yoshiyama M, [Sadr A](#), Sumi Y, Tagami J. Cavity adaptation of composite restorations prepared at crown and root: Optical assessment using SS-OCT. **Dent Mater J** 2019;38:779-789.
37. Kominami N, Shimada Y, Hosaka K, Luong MN, Yoshiyama M, [Sadr A](#), Sumi Y, Tagami J. The effect of flowable composite lining and dentin location on microtensile bond strength and internal fracture formation. **Dent Mater J** 2019;38:798-805.
38. Kashiwa M, Shimada Y, [Sadr A](#), Yoshiyama M, Sumi Y, Tagami J. Diagnosis of Occlusal Tooth Wear Using 3D Imaging of Optical Coherence Tomography Ex Vivo. **Sensors** (Basel). 2020 Oct 23;20(21):6016.
39. Muta S, Ikeda M, Nikaido T, Sayed M, Sadr A, Suzuki T, Tagami J. Chairside fabrication of provisional crowns on FDM 3D-printed PVA model. **J Prosthodont Res**. 2020;64:401-407.

40. Hosaka K, Tichy A, Ikeda M, Nakagawa K, [Sadr A](#), Tagami J, Takahashi M, Sato K, Nishitani Y, Klein-Junior CA, Pashley DH, Nakajima M. Ultra-high-speed videography of resin-dentin interface failure dynamics under tensile load. **Dent Mater**. 2019;35:e153-e161.
41. Zander V, Chan DC, [Sadr A*](#). Microcomputed Tomography Evaluation of Root Dentin Caries Prevention by Topical Fluorides Enriched with Potassium Iodide. **Sensors** (Basel) 2019;19:874.
42. Van Duker M, Hayashi J, Chan DC, Tagami J, [Sadr A*](#). Effect of Silver Diammine Fluoride and Potassium Iodide on Bonding to Demineralized Dentin. **Am J Dent** 2019;32(3):143-146.
43. Hasani E, Baghban AA, Sheikh-Al-Eslamian SM, [Sadr A](#). Effect of bleaching on color change of composite after immersion in chlorhexidine and coffee. **J Conserv Dent**. 2019 Nov-Dec;22(6):529-532.
44. Hayashi J, Espigares J, Takagaki T, Shimada Y, Tagami J, Numata T, Chan DC, [Sadr A*](#). Real-time In-depth Imaging of Gap Formation in Bulk-fill Resin Composites. **Dent Mater** 2019;35(4):585-596.
45. Aung SSMP, Takagaki T, Lyann SK, Ikeda M, Inokoshi M, [Sadr A](#), Nikaido T, Tagami J. Effects of Alumina-blasting Pressure on the Bonding to Super/Ultra-translucent Zirconia. **Dent Mater** 2019;35(5):730-739.
46. Ding J, Liu W, [Sadr A](#), He Y, Ebihara A, Li Y. Detection of Simulated Periradicular Lesions in Porcine Bone by Optical Coherence Tomography. **J Endod**. 2019;45(8):1024-1029.
47. Lee RC, Zhou Y, Finkleman S, [Sadr A](#), Seibel EJ. Near-Infrared Imaging of Artificial Enamel Caries Lesions with a Scanning Fiber Endoscope. **Sensors** (Basel) 2019;22;19(6). pii: E1419.
48. Han SH, [Sadr A](#), Shimada Y, Tagami J, Park SH. Internal adaptation of composite restorations with or without an intermediate layer: Effect of polymerization shrinkage parameters of the layer material. **J Dent** 2019;80:41-48.
49. Ei TZ, Shimada Y, Abdou A, [Sadr A](#), Yoshiyama M, Sumi Y, Tagami J. Three-dimensional assessment of proximal contact enamel using optical coherence tomography. **Dent Mater** 2019;35:e74-e82.
50. Lyann SK, Takagaki T, Nikaido T, Uo M, Ikeda M, [Sadr A](#), Tagami J. Effect of Different Surface Treatments on the Tensile Bond Strength to Lithium Disilicate Glass Ceramics. **J Adhes Dent** 2018;20(3):261-268.
51. Le NM, Song S, Zhou H, Xu J, Li Y, Sung CE, [Sadr A](#), Chung KH, Subhash HM, Kilpatrick L, Wang RK. A noninvasive imaging and measurement using optical coherence tomography angiography for the assessment of gingiva: An in vivo study. **J Biophotonics** 2018;11(12):e201800242.
52. Turkistani A, Islam S, Shimada Y, Tagami J, [Sadr A](#). Dental cements: Bioactivity, bond strength and demineralization progression around restorations. **Am J Dent**. 2018;31(Sp Is B):24B-31B.
53. Fronza BM, Makishi P, [Sadr A](#), Shimada Y, Sumi Y, Tagami J, Giannini M. Evaluation of bulk-fill systems: microtensile bond strength and non-destructive imaging of marginal adaptation. **Braz Oral Res** 2018;32:e80.
54. Zan KW, Nakamura K, Hamba H, [Sadr A](#), Nikaido T, Tagami J. Micro-computed tomography assessment of root dentin around fluoride-releasing restorations after demineralization/remineralization. **Eur J Oral Sci** 2018;126(5):390-399.
55. Zhou Y, Shimada Y, Matin K, [Sadr A](#), Yoshiyama M, Sumi Y, Tagami J. Assessment of root caries under wet and dry conditions using swept-source optical coherence tomography (SS-OCT). **Dent Mater J** 2018;30;37(6):880-888.
56. Kitasako Y, [Sadr A](#), Shimada Y, Ikeda M, Sumi Y, Tagami J. Remineralization capacity of carious and non-carious white spot lesions: clinical evaluation using ICDAS and SS-OCT. **Clin Oral Investig** 2019;23(2):863-872.
57. Garg S, Chan DC, [Sadr A](#). Potassium Iodide Reversal of Silver Diamine Fluoride Staining: A Case Report. **Oper Dent** 2019;44(3):221-226.
58. Lutgen P, Chan DC, [Sadr A*](#). Effects of Silver Diammine Fluoride on Bond Strength of Adhesives to Sound Dentin. **Dent Mater J** 2018 Nov 30;37(6):1003-1009.
59. Zhou Y, Lee R, [Sadr A](#), EJ Seibel. Near-infrared dental imaging using scanning fiber endoscope. **Proc SPIE** 2018; 10473:1047308.
60. Espigares J, Hayashi J, Shimada Y, Tagami J, [Sadr A*](#). Enamel margins resealing by low-viscosity resin infiltration. **Dent Mater J** 2018;30;37(2):350-357.
61. Ghasemi A, Sadr A, Pourhashemi A. Effect of Storage Time of a Ceramic Primer on Microshear Bond Strength to Zirconia. **J Dent** (Tehran). 2018;15(6):375-381.
62. Kakizaki S, Aoki A, Tsubokawa M, Lin T, Mizutani K, Koshy G, [Sadr A](#), Oda S, Sumi Y, Izumi Y. Observation and determination of periodontal tissue profile using optical coherence tomography. **J Periodontal Res** 2018;53:188-199.
63. Yoshikawa T, [Sadr A](#), Tagami J. μ CT-3D visualization analysis of resin composite polymerization and dye penetration test of composite adaptation. **Dent Mater J** 2018;37(1):71-77.
64. Nakata T, Kitasako Y, [Sadr A](#), Nakashima S, Tagami J. Effect of a calcium phosphate and fluoride paste on prevention of enamel demineralization. **Dent Mater J** 2018;37(1):65-70.
65. Yoshikawa T, [Sadr A](#), Tagami A. Effect of radiotherapy on resin composite bond strength and adaptation to dentin. **Asian Pac J Dent** 2017;17:49-53
66. Tabata T, Shimada Y, [Sadr A](#), Tagami J, Sumi Y. Assessment of enamel cracks at adhesive cavosurface margin using three-dimensional swept-source optical coherence tomography. **J Dent** 2017;61:28-32.

67. Hayashi J, Shimada Y, Tagami J, Sumi Y, Sadr A*. Real-Time Imaging of Gap Progress during and after Composite Polymerization. **J Dent Res** 2017;96(9):992-998.
68. Kitasako Y, Sasaki Y, Takagaki T, Sadr A, Tagami J. Erosive Tooth Wear Among Different Tooth Types and Surfaces in Japanese Adults 15 to 89 Years Old. **Oral Health Prev Dent** 2017;15(4):357-364.
69. Nakamura K, Hamba H, Nakashima S, Sadr A, Nikaido T, Oikawa M, Uo M, Tagami J. Effects of experimental pastes containing surface pre-reacted glass ionomer fillers on inhibition of enamel demineralization. **Dent Mater J** 2017;36(4):482-490.
70. Kitasako Y, Sasaki Y, Takagaki T, Sadr A, Tagami J. Multifactorial logistic regression analysis of factors associated with the incidence of erosive tooth wear among adults at different ages in Tokyo. **Clin Oral Investig** 2017;21:2637-2644.
71. Bahrololumi N, Beglou A, Najafi-Abbrandabadi A, Sadr A, Sheikh-Al-Eslamian SM, Ghasemi A. Effect of water storage on ultimate tensile strength and mass changes of universal adhesives. **J Clin Exp Dent** 2017;9(1):e78-e83.
72. Segarra MS, Shimada Y, Sadr A, Sumi Y, Tagami J. Three-Dimensional Analysis of Enamel Crack Behavior Using Optical Coherence Tomography. **J Dent Res** 2017;96(3):308-314.
73. Sugiura M, Kitasako Y, Sadr A, Shimada Y, Sumi Y, Tagami J. White spot lesion remineralization by sugar-free chewing gum containing bio-available calcium and fluoride: A double-blind randomized controlled trial. **J Dent** 2016;54:86-91.
74. Ueno T, Shimada Y, Matin K, Zhou Y, Wada I, Sadr A, Sumi Y, Tagami J. Optical analysis of enamel and dentin caries in relation to mineral density using swept-source optical coherence tomography. **J Med Imaging** (Bellingham). 2016;3(3):035507.
75. Yoshikawa T, Sadr A, Tagami J. Effects of C-factor on bond strength to floor and wall dentin. **Dent Mater J** 2016;35(6):918-922.
76. Tsuda Y, Kitasako Y, Sadr A, Nakashima S, Tagami J. Effects of brushing timing after erosive challenge on enamel loss in situ: White light interferometer and nanoindentation study. **Dent Mater J** 2016;35(4):613-20.
77. Thanatvarakorn O, Islam MS, Nakashima S, Sadr A, Nikaido T, Tagami J. Effects of zinc fluoride on inhibiting dentin demineralization and collagen degradation in vitro: A comparison of various topical fluoride agents. **Dent Mater J** 2016 Oct 1;35(5):769-775.
78. Zhou Y, Shimada Y, Matin K, Sadr A, Sumi Y, Tagami J. Assessment of bacterial demineralization around composite restorations using swept-source optical coherence tomography (SS-OCT). **Dent Mater** 2016;32(9):1177-88.
79. Horie K, Shimada Y, Matin K, Ikeda M, Sadr A, Sumi Y, Tagami J. Monitoring of cariogenic demineralization at the enamel-composite interface using swept-source optical coherence tomography. **Dent Mater** 2016;32:1103-12.
80. Alsayed EZ, Hariri I, Nakashima S, Shimada Y, Bakhsh TA, Tagami J, Sadr A*. Effects of Coating Materials on Nanoindentation Hardness of Enamel and Adjacent Areas. **Dent Mater** 2016 Jun;32(6):807-16.
81. Yoshikawa T, Morigami M, Sadr A, Tagami J. Environmental SEM and dye penetration observation on resin-tooth interface using different light curing method. **Dent Mater J**. 2016;35(1):89-96.
82. Shinagawa J, Inoue G, Nikaido T, Ikeda M, Sadr A, Tagami J. Dentin bonding performance and interface observation of an MMA-based restorative material. **Dent Mater J** 2016 Jul 30;35(4):578-84.
83. Han SH, Sadr A, Tagami J, Park SH. Internal adaptation of resin composites at two configurations: Influence of polymerization shrinkage and stress. **Dent Mater**. 2016 Sep;32(9):1085-94.
84. Tezuka H, Shimada Y, Matin K, Ikeda M, Sadr A, Sumi Y, Tagami J. Assessment of cervical demineralization induced by *Streptococcus mutans* using swept-source optical coherence tomography. **J Med Imaging** (Bellingham). 2016;3(1):014504.
85. Dao Luong MN, Shimada Y, Turkistani A, Tagami J, Sumi Y, Sadr A. Fractography of interface after microtensile bond strength test using swept-source optical coherence tomography. **Dent Mater**. 2016 Jul;32(7):862-9.
86. Oguro R, Nakajima M, Seki N, Sadr A, Tagami J, Sumi Y. The role of enamel thickness and refractive index on human tooth colour. **J Dent**. 2016 Aug;51:36-44.
87. Ito S, Shimada Y, Sadr A, Nakajima Y, Miyashin M, Tagami J, Sumi Y. Assessment of occlusal fissure depth and sealant penetration using optical coherence tomography. **Dent Mater J**. 2016;35(3):432-9.
88. T Yoshikawa, A Sadr, M Arakawa, J Tagami. Bond strength of resin composites to cavity floor and cavity wall dentin Asian Pacific journal of dentistry: **Asian Pac J Dent** 2016;16:23-28.
89. Bista B, Nakashima S, Nikaido T, Sadr A, Takagaki T, Romero MJ, Sato T, Tagami J. Adsorption behavior of methacryloyloxydecyl dihydrogen phosphate on an apatite surface at neutral pH. **Eur J Oral Sci**. 2016;124(2):195-203.
90. Sato T, Takagaki T, Matsui N, Hamba H, Sadr A, Nikaido T, Tagami J. Morphological Evaluation of the Adhesive/Enamel interfaces of Two-step Self-etching Adhesives and Multimode One-bottle Self-etching Adhesives. **J Adhes Dent**. 2016;18(3):223-9.
91. Han SH, Sadr A, Tagami J, Park SH. Non-destructive evaluation of an internal adaptation of resin composite restoration with swept-source optical coherence tomography and micro-CT. **Dent Mater**. 2016;32(1):e1-7.

92. Makishi P, Pacheco RR, Sadr A, Shimada Y, Sumi Y, Tagami J, Giannini M. Assessment of Self-Adhesive Resin Composites: Nondestructive Imaging of Resin-Dentin Interfacial Adaptation and Shear Bond Strength. **Microsc Microanal**. 2015;21(6):1523-1529.
93. Kitasako Y, Sadr A, Burrow MF, Tagami J. Thirty six-month clinical evaluation of a highly-filled flowable composite for direct posterior restorations. **Aust Dent J**. 2016 Sep;61(3):366-73.
94. Islam MS, Khunkar SJ, Nakashima S, Sadr A, Nikaido T, Tagami J. Comparative study of demineralized collagen degradation determined by Hydroxyproline assay and Microscopic depth measurement. **J Dent**. 2016;47:94-7.
95. Nakamura M, Kitasako Y, Nakashima S, Sadr A, Tagami J. Impact of toothpaste on abrasion of sound and eroded enamel: An in vitro white light interferometer study. **Am J Dent**. 2015;28(5):268-72.
96. Giannini M, Takagaki T, Bacelar-Sá R, Vermelho PM, Ambrosano GM, Sadr A, Nikaido T, Tagami J. Influence of resin coating on bond strength of self-adhesive resin cements to dentin. **Dent Mater J**. 2015;34(6):822-7.
97. Turkistani A, Shimada Y, Nakashima S, Tagami J, Sadr A*. Microgaps and lesion progress evaluated by optical coherence tomography. **J Dent Res**. 2015 Aug;94(8):1070-7.
98. Nikaido T, Nurrohman H, Takagaki T, Sadr A, Ichinose S, Tagami J. Nanoleakage in Hybrid Layer and Acid-Base Resistant Zone at the Adhesive/Dentin Interface. **Microsc Microanal** 2015;21(5):1271-7.
99. Shimada Y, Sadr A, Sumi Y, Tagami J. Application of Optical Coherence Tomography (OCT) for Diagnosis of Caries, Cracks, and Defects of Restorations. **Curr Oral Health Rep**. 2015;2(2):73-80. Review.
100. Ibusuki T, Kitasako Y, Sadr A, Shimada Y, Sumi Y, Tagami J. Observation of white spot lesions using swept source optical coherence tomography (SS-OCT): in vitro and in vivo study. **Dent Mater J**. 2015;34(4):545-52.
101. Oshima M, Hamba H, Sadr A, Nikaido T, Tagami J. Effect of polymer-based desensitizer with sodium fluoride on prevention of root dentin demineralization. **Am J Dent**. 2015;28(3):123-7.
102. Nikaido T, Inoue G, Takagaki T, Takahashi R, Sadr A, Tagami J. Resin Coating Technique for Protection of Pulp and Increasing Bonding in Indirect Restoration. **Curr Oral Health Rep**. 2015;2(2):81-86. Review.
103. Majkut P, Shimada Y, Tagami J, Sumi Y, Sadr A*. Validation of Optical Coherence Tomography against Micro-computed Tomography for Evaluation of Remaining Coronal Dentin Thickness. **J Endod**. 2015 Aug;41(8):1349-52.
104. Yoshimine Y, Shimada Y, Tagami J, Sadr A*. Interfacial Adaptation of Composite Restorations Before and After Light Curing: Effects of Adhesive and Filling Technique. **J Adhes Dent**. 2015;17(4):329-36.
105. Makishi P, Thitthaweerat S, Sadr A, Shimada Y, Sumi Y, Tagami J, Giannini M. Assessment of current adhesives in class I cavity: nondestructive imaging using optical coherence tomography and microtensile bond strength. Revised for **Dent Mater**. 2015;31(9):e190-200.
106. Nagai S, Otsuki M, Sadr A, Shimada Y, Hayashi J, Tagami J. Effect of erbium-doped: yttrium-aluminum-garnet laser preparation on resin-cavity interface using a universal adhesive evaluated by swept source optical coherence tomography. **Asian Pac J Dent** 2015;15:41-50.
107. Romero MJ, Nakashima S, Nikaido T, Ichinose S, Sadr A, Tagami J. Inhibition of hydroxyapatite growth by casein, a potential salivary phosphoprotein homologue. **Eur J Oral Sci**. 2015 Aug;123(4):288-96.
108. Bagheri G H, Sadr A, Espigares J, Hariri I, Nakashima S, Hamba H, Shafiei F, Moztarzadeh F, Tagami J. Study on the influence of leucine-rich amelogenin peptide (LRAP) on the remineralization of enamel defects via micro-focus x-ray computed tomography and nanoindentation. **Biomed Mater**. 2015 Jun 4;10(3):035007.
109. Bakhsh TA, Sadr A, Tagami J. In situ characterization of resin-dentin interfaces using conventional vs. cryofocused ion-beam milling. Revised for **Dent Mater**. 2015 Jul;31(7):833-44.
110. Alsayed EZ, Hariri I, Sadr A*, Bakhsh TA, Shimada Y, Nakashima S, Tagami J, Sumi Y. Optical coherence tomography for evaluation of enamel and protective coatings. **Dent Mater J** 2015;34(1):98-107.
111. Espigares J, Sadr A*, Hamba H, Shimada Y, Otsuki M, Tagami J, Sumi Y. Assessment of Natural Enamel Lesions with Optical Coherence Tomography in Comparison to X-ray Tomography. **J Med Imag**. 2015; 2(1), 014001.
112. Turkistani A, Sadr A*, Shimada Y, Nikaido T, Sumi Y, Tagami J. Sealing performance of resin cements before and after thermal cycling: evaluation by optical coherence tomography. **Dent Mater**. 2014 Sep;30(9):993-1004.
113. Mandurah MM, Sadr A*, Bakhsh TA, Shimada Y, Sumi Y, Tagami J. Characterization of transparent dentin in attrited teeth using optical coherence tomography. **Lasers Med Sci**. 2014; 30 (4), 1189-1196.
114. Marghalani HY, Bakhsh T, Sadr A, Tagami J. Ultra-structural characterization of enamel-resin interface using FIB-TEM technology. **J Adhesion Sci Tech** 2014; 28(11),1005-1019.
115. Bakhsh T, Sadr A, Tagami J. Focused ion beam processing for transmission electron microscopy of composite/adhesive interfaces. **J Adhesion Sci Tech** 2015; 29(3), 232-243.
116. Bista A, Sadr A*, Nazari A, Shimada Y, Sumi Y, Tagami J. Non-destructive Assessment of Current One-step Self-etch Dental Adhesives using Optical Coherence Tomography. **J Biomed Opt**. 2013 Jul;18(7):76020.
117. Moosavi H, Hariri I, Sadr A*, Thitthaweerat S, Tagami J. Effects of curing mode and moisture on nanoindentation mechanical properties and bonding of a self-adhesive resin cement to pulp chamber floor. **Dent Mater**. 2013 Jun;29(6):708-17.

118. Mandurah M, Sadr A*, Shimada Y, Kitasako Y, Nakashima S, Bakshsh TA, Sumi Y. Monitoring Remineralization of Enamel Subsurface Lesions by Optical Coherence Tomography. **J Biomed Opt.** 2013;18(4):46006.
119. Sadr A*, Mandurah M, Shimada Y, Tagami J, Sumi Y. Monitoring of enamel lesion remineralization by optical coherence tomography: An alternative approach towards signal analysis. **Proc SPIE** 2013;8566: 856602. (full-text non-reviewed proceedings)
120. Hariri I, Sadr A*, Nakashima S, Shimada Y, Tagami J, Sumi Y. Estimation of enamel and dentin mineral content from refractive index. **Caries Res.** 2013;47:18–26. (*featured as journal cover*)
121. Nazari A, Sadr A*, Saghiri MA, Campillo-Funollet M, Hamba H, Shimada Y, Tagami J, Sumi Y. Non-destructive characterization of voids in six flowable composites using swept-source optical coherence tomography. **Dent Mater.** 2013;29(3):278-86.
122. Bakshsh TA, Sadr A*, Shimada Y, Mandurah M, Hariri I, Alsayed EZ, Tagami J, Sumi Y. Concurrent evaluation of composite internal adaptation and bond strength in a class-I cavity. **J Dent.** 2013;41(1):60-70.
123. Nazari A, Sadr A*, Shimada Y, Tagami J, Sumi Y. 3D assessment of void and gap formation in flowable resin composites using optical coherence tomography. **J Adhes Dent.** 2013 Jun;15(3):237-43.
124. Kitasako Y, Sadr A*, Hamba H, Ikeda M, Tagami J. Gum containing calcium fluoride reinforces enamel subsurface lesions in situ. **J Dent Res.** 2012;91:370-5.
125. Nazari A, Sadr A*, Nakashima S, Shimada Y, Tagami J. Effect of Hydration on Assessment of Early Enamel Lesion using Swept-source Optical Coherence Tomography. **J Biophotonics.** 2013;6(2):171-7.
126. Hariri I, Sadr A*, Shimada Y, Tagami J, Sumi Y. Effects of structural orientation of enamel and dentin on light attenuation and local refractive index: an optical coherence tomography study. **J Dent.** 2012;40:387-96.
127. Emamieh S, Sadr A*, Ghasemi A, Torabzadeh H, Akhavanzanjani V, Tagami J. Effects of solvent drying-time and water storage on ultimate tensile strength of adhesives. **J Invest Clin Dent.** 2014 Feb;5(1):51-7.
128. Hariri I, Shimada Y, Sadr A*, Tagami J. Quantitative Analysis of Nanoleakage Expression and Bond Strength of an Etch-and-Rinse Adhesive to Enamel and Dentin: Effect of Increasing Thermal Cycling Regimens. **J Adhes Dent.** 2012;14(3):235-43.
129. Sadr A*, Nikaido T, Takagaki T, Hariri I, Nazari A, Tagami J. Ultra-morphological and Nanomechanical Characterization of Reinforced Enamel and Dentin by Self-etch Adhesives: The Super Tooth. **J Nano Res.** 2012;16:131-140.
130. Sadr A*, Nakashima S, Shimada Y, Tagami J, Sumi Y. Longitudinal assessment of subsurface artificial root caries lesions by optical coherence tomography in comparison with transverse microradiography. **Proc. SPIE** 2012 8208:16.
131. Natsume Y, Nakashima S, Sadr A*, Shimada Y, Tagami J, Sumi Y. Estimation of lesion progress in artificial root caries by Swept Source Optical Coherence Tomography in comparison to transverse microradiography. **J Biomed Opt.** 2011;16(7):071408.
132. Cho E, Sadr A*, Inai N, Tagami J. Evaluation of resin composite polymerization by three dimensional micro-CT imaging and nanoindentation. **Dent Mater.** 2011;27(11):1070-8.
133. Bakshsh TA, Sadr A*, Shimada Y, Tagami J, Sumi Y. Non-invasive quantification of resin-dentin interfacial gaps using optical coherence tomography. **Dent Mater.** 2011;27(9):915-25.
134. Sadr A*, Shimada Y, Mayoral JR, Hariri I, Bakshsh TA, Sumi Y, Tagami J. Swept Source Optical Coherence Tomography for Quantitative and Qualitative Assessment of Dental Composite Restorations. **Proc. SPIE** 2011;7884:11.
135. S Ogisu, R Kishikawa, A Sadr, K Matoba, N Inai, M Otsuki, J Tagami. Effect of convergent light-irradiation on microtensile bond strength of resin composite to dentin. **Int Chin J Dent** 2009;9:45-53.
136. Ansari ZJ, Sadr A*, Moezizadeh M, Aminian R, Ghasemi A, Shimada Y, Tagami J, Ansari SJ, Moayedi S. Effects of one-year storage in water on bond strength of self-etching adhesives to enamel and dentin. **Dent Mater J.** 2008;27:266-72.
137. Sadr A*, Shimada Y, Lu H, Tagami J. The viscoelastic behavior of dental adhesives: a nanoindentation study. **Dent Mater.** 2009;25:13-9.
138. Sadr A*, Shimada Y, Tagami J. Effects of solvent drying time on micro-shear bond strength and mechanical properties of two self-etching adhesive systems. **Dent Mater.** 2007;23:1114-9.
139. Sadr A*, Ghasemi A, Shimada Y, Tagami J. Effects of storage time and temperature on the properties of two self-etching systems. **J Dent.** 2007;35:218-25.
140. Nurrohman H, Nakashima S, Takagaki T, Sadr A, Nikaido T, Asakawa Y, Uo M, Marshall SJ, Tagami J. Immobilization of phosphate monomers on collagen induces biomimetic mineralization. **Biomed Mater Eng.** 2015;25(1):89-99.
141. Kitasako Y, Sasaki Y, Takagaki T, Sadr A, Tagami J. Age-specific prevalence of erosive tooth wear by acidic diet and gastroesophageal reflux in Japan. **J Dent.** 2015;43(4):418-23.

142. Matsui N, Takagaki T, Sadr A, Ikeda M, Ichinose S, Nikaido T, Tagami J. The role of MDP in a bonding resin of a two-step self-etching adhesive system. **Dent Mater J.** 2015;34(2):227-33.
143. Khunkar SJ, Utaka S, Hariri I, Sadr A, Ikeda M, Nakashima S, Nikaido T, Tagami J. Formation and characterization of hypermineralized zone beneath dentine lesion body induced by topical fluoride in-vitro. **Arch Oral Biol.** 2015; 10;60(4):574-581.
144. Wada I, Shimada Y, Ikeda M, Sadr A, Nakashima S, Tagami J, Sumi Y. Clinical assessment of non carious cervical lesion using swept-source optical coherence tomography. **J Biophotonics** 2015;8(10):846-54.
145. Lodha E, Hamba H, Nakashima S, Sadr A, Nikaido T, Tagami J. Effect of different desensitizers on inhibition of bovine dentin demineralization: micro-computed tomography assessment. **Eur J Oral Sci.** 2014 Dec;122(6):404-10.
146. Marghalani H, Bakhsh T, Sadr A, Tagami J. Ultramorphological Assessment of Dentin-Resin Interface After Use of Simplified Adhesives. **Oper Dent.** 2015;40:E28-39.
147. Imamura Y, Otsuki M, Sadr A. Effect of CPP-ACP and sodium fluoride on prevention of re-staining after bleaching **Asian-Pacific J Dent: APJD**; 2013:13,47-55.
148. Moosavi H, Darvishzadeh F, Sadr A, Salary S. In vitro effects of different moisture level and curing method on microleakage of resin cements to pulp chamber dentine. **Eur J Prosthodont Restor Dent.** 2014;22:43-7.
149. Yoshikawa T, Morigami M, Sadr A, Tagami J. Effects of light curing method and resin composite composition on composite adaptation to the cavity wall. **Dent Mater J.** 2014;33:499-503.
150. Nakashima S, Sadr A, Tagami J. A Theoretical Consideration on Critical pH in Enamel Demineralization- Why the Critical pH is Estimated to be Around 5.3. **Jpn J Conserv Dent.** 2014;57:111-120.
151. Joves GJ, Inoue G, Sadr A, Nikaido T, Tagami J. Nanoindentation hardness of intertubular dentin in sound, demineralized and natural caries-affected dentin. **J Mech Behav Biomed Mater.** 2014;32:39-45.
152. Nakajima Y, Shimada Y, Sadr A, Wada I, Miyashin M, Takagi Y, Tagami J, Sumi Y. Detection of occlusal caries in primary teeth using swept source optical coherence tomography. **J Biomed Opt.** 2014;19:16020.
153. Kikuchi K, Akiba N, Sadr A, Sumi Y, Tagami J, Minakuchi S. Evaluation of the marginal fit at implant-abutment interface by optical coherence tomography. **J Biomed Opt.** 2014;19:55002.
154. Jamleh A, Sadr A, Nomura N, Ebihara A, Yahata Y, Hanawa T, Tagami J, Suda H. Endodontic instruments after torsional failure: Nanoindentation test. **Scanning.** 2014;36:437-43.
155. Kuribayashi M, Kitasako Y, Sadr A, Tagami J. Caries Activity Assessment Using Fiber Optic and Ion-sensitive Field Effect Transistor pH Micro Sensors versus Pen-type Laser Fluorescence Device: An in vitro Comparison. **Jpn J Conserv Dent.** 2013;56(1):55-62.
156. Yoshikawa T, Morigami M, Sadr A, Tagami J. Acceleration of curing of resin composite at the bottom surface using slow-start curing methods. **Dent Mater J.** 2013;32(6):999-1004
157. Emamieh S, Sadr A, Ghasemi A, Torabzadeh H, Akhavanzanjani V, Tagami J. Effects of solvent drying time on mass change of three adhesives. **J Conserv Dent.** 2013;16: 418.
158. Thanatvarakorn O, Nakashima S, Sadr A, Prasansuttiporn T, Thitthaweerat S, Tagami J. Effect of a calcium-phosphate based desensitizer on dentin surface characteristics. **Dent Mater J.** 2013;32(4):615-21.
159. Utaka S, Nakashima S, Sadr A, Ikeda M, Nikaido T, Shimizu A, Tagami J. Cariotester, a new device for assessment of dentin lesion remineralization in vitro. **Dent Mater J.** 2013;32(2):241-7.
160. Mita H, Kitasako Y, Takagaki T, Sadr A, Tagami J. Development and evaluation of a low-erosive apple juice drink with Phosphoryl-Oligosaccharides of Calcium. **Dent Mater J.** 2013;32(2):212-8.
161. Kirihiro M, Inoue G, Nikaido T, Ikeda M, Sadr A, Tagami J. Effect of fluoride concentration in adhesives on morphology of acid-base resistant zones. **Dent Mater J.** 2013;32(4):578-84.
162. Shimada Y, Nakagawa H, Sadr A, Wada I, Nakajima M, Nikaido T, Otsuki M, Tagami J, Sumi Y. Noninvasive cross-sectional imaging of proximal caries using swept-source optical coherence tomography (SS-OCT) in vivo. **J Biophotonics** 2014;7(7):506-13..
163. Nakagawa H, Sadr A, Shimada Y, Tagami J, Sumi Y. Validation of swept source optical coherence tomography (SS-OCT) for the diagnosis of smooth surface caries in vitro. **J Dent** 2013;41(1):80-9.
164. Joves GJ, Inoue G, Nakashima S, Sadr A, Nikaido T, Tagami J. Mineral density, morphology and bond strength of natural versus artificial caries-affected dentin. **Dent Mater J.** 2013;32(1):138-143.
165. Gando I, Ariyoshi M, Ikeda M, Sadr A, Nikaido T, Tagami J. Resistance of dentin coating materials against abrasion by toothbrush. **Dent Mater J.** 2013;32(1):68-74.
166. Thanatvarakorn O, Nakashima S, Sadr A, Prasansuttiporn T, Ikeda M, Tagami J. In vitro evaluation of dentinal hydraulic conductance and tubule sealing by a novel calcium-phosphate desensitizer. **J Biomed Mater Res Part B.** 2013;101(2):303-9.
167. Imai K, Shimada Y, Sadr A, Sumi Y, Tagami J. Noninvasive cross-sectional visualization of enamel cracks on by optical coherence tomography. **J Endod.** 2012;38(9):1269-74.

168. Nurrohman H, Nikaido T, Takagaki T, Sadr A, Ichinose S, Tagami J. Apatite crystal protection against acid-attack beneath resin-dentin interface with four adhesives: TEM and crystallography evidence. **Dent Mater**. 2012;28:e89-98.
169. Kitasako Y, Tanaka M, Sadr A, Hamba H, Ikeda M, Tagami J. Effects of a chewing gum containing phosphoryl oligosaccharides of calcium (POs-Ca) and fluoride on remineralization and crystallization of enamel subsurface lesions in situ. **J Dent**. 2011;39:771-9.
170. Hamba H, Nikaido T, Sadr A, Nakashima S, Tagami J. Enamel Lesion Parameter Correlations between Polychromatic Micro-CT and TMR. **J Dent Res**. 2012;91:586-591.
171. Inoue G, Nikaido T, Sadr A, Tagami J. Morphological categorization of acid-base resistant zones with self-etching primer adhesive systems. **Dent Mater J**. 2012;31:232-8.
172. Nazari A, Shimada Y, Sadr A, Tagami J. Pre-etching vs. grinding in promotion of adhesion to intact enamel using self-etch adhesives. **Dent Mater J**. 2012;31:394-400.
173. Tano E, Otsuki M, Kato J, Sadr A, Ikeda M, Tagami J. Effects of 405 nm Diode Laser on Titanium Oxide Bleaching Activation. **Photomed Laser Surg**. 2012;30:648-54.
174. Shimada Y, Sadr A, Nazari A, Nakagawa H, Otsuki M, Tagami J, Sumi Y. 3D evaluation of composite resin restoration at practical training using swept-source optical coherence tomography (SS-OCT). **Dent Mater J**. 2012;31:409-17.
175. Jamleh A, Sadr A, Nomura N, Yahata Y, Ebihara A, Hanawa T, Tagami J, Suda H. Nano-indentation testing of new and fractured nickel-titanium endodontic instruments. **Int Endod J** 2012;45(5):462-8.
176. Yahagi C, Takagaki T, Sadr A, Ikeda M, Nikaido T, Tagami J. Effect of lining with a flowable composite on internal adaptation of direct composite restorations using all-in-one adhesive systems. **Dent Mater J**. 2012;31:481-8.
177. Nurrohman H, Nikaido T, Takagaki T, Sadr A, Waidyasekera K, Kitayama S, Ikeda M, Tagami J. Dentin Bonding Performance and Ability of Four MMA-based Adhesive Resins to Prevent Demineralization Along the Hybrid Layer. **J Adhes Dent**. 2012;14(4):339-48.
178. Ichikawa C, Nikaido T, Inoue G, Sadr A, Tagami J. Ultramorphological Evaluation of the Dentin Acid-Base Resistant Zone of Two-step Self-etching Systems After Long-term Storage in Water. **J Adhes Dent**. 2012;14(3):207-13.
179. Mohammadi N, Kimyai S, Abed-Kahnamoii M, Ebrahimi-Chaharom ME, Sadr A, M Daneshi. Effect of 15% carbamide peroxide bleaching gel on color stability of giomer and microfilled composite resin: An in vitro comparison. **Medicina Oral, Patologia Oral y Cirugia Bucal**. 2012;17(6):e1082-8.
180. Kuribayashi M, Kitasako Y, Matin K, Sadr A, Shida K, Tagami J. Intraoral pH measurement of carious lesions with qPCR of cariogenic bacteria to differentiate caries activity. **J Dent**. 2012;40:222-228.
181. Li N, Takagaki T, Sadr A, Waidyasekera K, Ikeda M, Chen J, Nikaido T, Tagami J. Effect of Curing Modes of Dual-curing Core Systems on Microtensile Bond Strength to Dentin and Formation of an Acid-Base Resistant Zone. **J Adhes Dent**. 2011;13(6):527-35.
182. Hamba H, Nikaido T, Inoue G, Sadr A, Tagami J. Effects of CPP-ACP with sodium fluoride on inhibition of bovine enamel demineralization: a quantitative assessment using micro-computed tomography. **J Dent**. 2011;39:405-13.
183. Kishi A, Otsuki M, Sadr A, Ikeda M, Tagami J. Effect of light units on tooth bleaching with visible-light activating titanium dioxide photocatalyst. **Dent Mater J**. 2011;30:723-9.
184. Nurrohman H, Nikaido T, Sadr A, Takagaki T, Kitayama S, Ikeda M, Waidyasekera K, Tagami J. Long-term regional bond strength of three MMA-based adhesive resins in simulated vertical root fracture. **Dent Mater J**. 2011;30:655-63.
185. Nikaido T, Ichikawa C, Li N, Takagaki T, Sadr A, Yoshida Y, Suzuki K, Tagami J. Effect of functional monomers in all-in-one adhesive systems on formation of enamel/dentin acid-base resistant zone. **Dent Mater J**. 2011;30:576-82.
186. Bakry AS, Takahashi H, Otsuki M, Sadr A, Yamashita K, Tagami J. CO2 Laser Improves 45S5 Bioglass Interaction with Dentin. **J Dent Res**. 2011;90:246-50.
187. Makishi P, Shimada Y, Sadr A, Tagami J, Sumi Y. Marginal adaptation of self-etch adhesives by 3D swept-source optical coherence tomography. **J Dent**. 2011;39:316-25.
188. Nassar M, Awawdeh L, Jamleh A, Sadr A, Tagami J. Adhesion of Epiphany Self-Etch Sealer to Dentin Treated with Intracanal Irrigating Solutions. **J Endod**. 2011;37:228-30.
189. Kimyai S, Savadi-Oskoei S, Ajami AA, Sadr A, Asdagh S. Effect of three prophylaxis methods on surface roughness of giomer, **Med Oral Patol Oral Cir Bucal**. 2011;16:e110-4.
190. Kimyai S, Lotfipour F, Pourabbas R, Sadr A, Nikazar S, Milani M. Effect of two prophylaxis methods on adherence of Streptococcus mutans to microfilled composite resin and giomer surfaces. **Med Oral Patol Oral Cir Bucal**. 2011;16:e561-7.

191. Kitasako Y, Sadr A, Nikaido T, Tagami J. Relationship between perception of difficulty and clinical experience of approximal composite restorations in final-year undergraduate students at Tokyo Medical and Dental University. **J Med Dent Sci**. 2011;58(1):1-5.
192. Tsujimoto M, Nikaido T, Inoue G, Sadr A, Tagami J. Ultrastructural observation of the acid-base resistant zone of all-in-one adhesives using three different acid-base challenges. **Dent Mater J**. 2010;29(6):655-60.
193. Kitayama S, Nikaido T, Ikeda M, Sadr A, Miura H, Tagami J. Internal coating of zirconia restoration with silica-based ceramic improves bonding of resin cement to dental zirconia ceramic. **Biomed Mater Eng**. 2010;20(2):77-87.
194. Kondo Y, Takagaki T, Okuda M, Ikeda M, Kadoma Y, Yamauchi J, Okada K, Sadr A, Nikaido T, Tagami J. Effect of PMMA filler particles addition on the physical properties of resin composite. **Dent Mater J**. 2010;29(5):596-601.
195. Takahashi R, Nikaido T, Ariyoshi M, Kitayama S, Sadr A, Foxton RM, Tagami J. Thin resin coating by dual-application of all-in-one adhesives improves dentin bond strength of resin cements for indirect restorations. **Dent Mater J**. 2010;29(5):615-22.
196. Li N, Nikaido T, Takagaki T, Sadr A, Makishi P, Chen J, Tagami J. The role of functional monomers in bonding to enamel: acid-base resistant zone and bonding performance. **J Dent**. 2010;38:722-30.
197. Shimada Y, Sadr A, Burrow MF, Tagami J, Ozawa N, Sumi Y. Validation of swept-source optical coherence tomography (SS-OCT) for the diagnosis of occlusal caries. **J Dent**. 2010;38:655-65.
198. Makishi P, Shimada Y, Sadr A, Wei S, Ichinose S, Tagami J. Nanoleakage expression and microshear bond strength in the resin cement/dentin interface. **J Adhes Dent**. 2010;12:393-401.
199. Kitayama S, Nikaido T, Takahashi R, Zhu L, Ikeda M, Foxton RM, Sadr A, Tagami J. Effect of primer treatment on bonding of resin cements to zirconia ceramic. **Dent Mater**. 2010;26:426-32.
200. Shimada Y, Ichinose S, Sadr A, Burrow MF, Tagami J. Localization of matrix metalloproteinases (MMPs-2, 8, 9 and 20) in normal and carious dentine. **Aust Dent J**. 2009;54:347-54.
201. Okada H, Sadr A, Shimada Y, Tagami J. Micro-shear bond strength of current one-step adhesives to cementum and dentin. **Am J Dent**. 2009;22:259-63.
202. Ikeda I, Otsuki M, Sadr A, Nomura T, Kishikawa R, Tagami J. Effect of filler content of flowable composites on resin-cavity interface. **Dent Mater J**. 2009;28:679-85.
203. Ansari G, Vahid Golpaygani M, Sadr A. Comparison of fluoride uptake level by enamel from Iranian school brand and standard NaF mouthrinses. **J Dent Res Dent Clin Dent Prospect**. 2009;3:1-6.
204. Wei S, Shimada Y, Sadr A, Tagami J. Effect of double-application of three single-step self-etch adhesives on dentin bonding and mechanical properties of resin-dentin area. **Oper Dent**. 2009;34:716-24.
205. He Z, Otsuki M, Sadr A, Tagami J. Acid resistance of dentin after erbium:yttrium-aluminum-garnet laser irradiation. **Lasers Med Sci**. 2009;24:507-13.
206. He Z, Shimada Y, Sadr A, Ikeda M, Tagami J. The effects of cavity size and filling method on the bonding to Class I cavities. **J Adhes Dent**. 2008;10:447-53.
207. Wei S, Sadr A, Shimada Y, Tagami J. Effect of caries-affected dentin hardness on the shear bond strength of current adhesives. **J Adhes Dent**. 2008;10:431-40.
208. Bakry AS, Sadr A, Inoue G, Otsuki M, Tagami J. Effect of Er:YAG laser treatment on the microstructure of the dentin/adhesive interface after acid-base challenge. **J Adhes Dent**. 2007;9(6):513-20.
209. Yuan Y, Shimada Y, Ichinose S, Sadr A, Tagami J. Effects of dentin characteristics on interfacial nanoleakage. **J Dent Res**. 2007;86:1001-6.
210. Bakry AS, Sadr A, Takahashi H, Otsuki M, Tagami J. Analysis of Er:YAG lased dentin using attenuated total reflectance Fourier transform infrared and X-ray diffraction techniques. **Dent Mater J**. 2007;26(3):422-8.
211. Shimada Y, Sattabanasuk V, Sadr A, Yuan Y, He Z, Tagami J. Shear bond strength of tooth-colored indirect restorations bonded to mid-coronal and cervical dentin. **Dent Mater J**. 2006;25(1):7-12.
212. Ravaghi V, Sadr A, Borzabadi Farahani N. The motivation of dental students to enter the dental school. **J Dent Sch Natl Univ Iran** 2005;22:597-604.
213. Ansari G, Sadr A. Evaluation of Fluoride uptake by enamel from Iran Schools' rinse in comparison with NaFRINSE (In vitro). **J Dental Sch Natl Univ Iran** 2004;21:642-652.

b) Invited Contributions/Special Lectures (Selected)

1. Sadr A. Development of Dental Optical Coherence Tomography. Northern Lights Meeting, Toronto, Canada. Nov 6, 2023.
2. Sadr A. Structural Adhesive Dental Restorations. *CIOB 2023 Meeting*, Manaus, Brazil. Sep 8, 2023.
3. Sadr A. Structural Adhesive Dental Restorations. *AOS CIORB 2023 Meeting*, Santiago, Chile. July 21, 2023.
4. Sadr A. Structural Adhesive Dental Restorations. *7th International Congress on Adhesive Dentistry*, Konya, Turkey. June 3, 2023.
5. Sadr A. Structural Adhesive Dental Restorations. *Mimetika Meeting*, Bern, Switzerland. May 6, 2023.
6. Sadr A. Structural Adhesive Dental Restorations. *105th Annual Meeting of Academy of Prosthodontics*, Naples, FL, USA. May 4, 2023.
7. Sadr A. Structural Adhesive Dental Restorations. *7th District Dental Society Annual Meeting*, Rochester, NY, USA. April 28, 2023.
8. Sadr A. An Overview of Digital Technologies in Everyday Practice of Dentistry. *Snohomish County Dental Society (SCDS) Member Meeting*, Lynwood, WA. April 19, 2023
9. Sadr A. Structural Adhesive Dental Restorations. *UW International Congress on Adhesive Dentistry*, Seattle, WA, USA. March 11, 2023.
10. Sadr A. Structural Adhesive Dental Restorations. *International Academy of Gnathology American Section*, Seattle, WA, USA. March 10, 2023.
11. Sadr A. Structural Adhesive Dental Restorations: Diagnosis and Management. *State-of-the Art Adhesive Dentistry Forum*, Seattle, WA, USA. September 10, 2022.
12. Sadr A. Update on Research in Adhesive Restorative Dentistry, *Tokyo Medical and Dental University Graduate School*, Invited Lecture, Tokyo, Japan. August 31, 2022.
13. Sadr A. Structural Dental Restorations: Biomimetic and Heroic. *Naghshe Jahan Dental Conference*. Isfahan, Iran. August 22, 2022.
14. Sadr A. Development of Optical Coherence Tomography: Benchside to Chairside. *UW SOD Research Day Faculty Presentation (virtual)*, Seattle, WA, USA. February 1, 2022.
15. Sadr A. Proof of Concept Research for Clinically Successful Bonding. *Washington State Dental Association Pacific Northwest Dental Conference* Speaker, Seattle, WA, USA. November 12, 2021.
16. Sadr A. Restoration of Structurally Compromised Tooth with Fiber Adhesive technology. *CIORB 2021 (Webinar)*, Santiago, Chile. October 8, 2021.
17. Sadr A. Restoration of Structurally Compromised Tooth with Fiber Adhesive technology. *Academy of Biomimetic Dentistry International Webinar*. June 2021.
18. Sadr A. Recent Developments on the Diagnosis and Management of Deep Caries. *Academy of Biomimetic Dentistry International Webinar*. June 2021.
19. Sadr A. 3D swept source OCT for applications in dentistry and insight into B4T research. *Optical Society of America International Student Chapter Invited Lecture (Online)*, Tokyo, Japan. April 21, 2021
20. Sadr A. Restoration of Structurally Compromised Tooth with Fiber Adhesive technology. *South American Biomimetic Dentistry Group Santiago, Chile* Invited Lecture (online) December 4, 2020
21. Sadr A. Cutting Edge Research in Cariology and Operative Dentistry, *Tokyo Medical and Dental University Graduate School*, Invited Seminar (online). December 2, 2020.
22. Sadr A. Restoration of Structurally Compromised Tooth with Adhesive technology. Invited Speaker (online), *Walla Walla Valley Dental Society*, WA, USA. April 22, 2021.
23. Sadr A. Restoration of Structurally Compromised Tooth with Adhesive technology. Special Lecture (recorded), *Iranian General Dentists Association*, Tehran, Iran. April 10, 2021.
24. Sadr A. Biomimetic Approach with Fiber-reinforced Composite. Invited Speaker (online), *Iranian Biomimetic Dentistry Symposium*, Mashhad, Iran. February 25, 2021.
25. Sadr A. Restoration of Structurally Compromised Tooth with Adhesive technology. *Washington Academy of General Dentistry Full day handson and CE*, Tacoma, WA, USA. November 14, 2020.
26. Sadr A. Our Current Understanding from Clinically Successful Bonding. Invited Speaker (online), *International Academy for Adhesive Dentistry UW Lecture Series 2020 Webinar*, Seattle, WA, USA. September 12, 2020.
27. Sadr A. Seeing is Believing: Optical Coherence Tomography in Research and Practice of Dentistry. Invited Speaker (online), *19th Annual Meeting of Academy of Microscope Enhanced Dentistry*. Chicago, IL, USA. October 24, 2020.
28. Sadr A. An Update on Adhesive Dentistry in Direct and Indirect Restorative Dentistry. Special Lecture, *NYU Langone GPR Program*. Brooklyn, NY, USA. June 2, 2020.
29. Sadr A. Biomimetic Dentistry and Clinically Successful Bonding. *Online invited seminar*, Santiago, Chile. April 17, 2020.

30. Sadr A. Proof-of-concept research for clinically successful bonding. *Graduate Prosthodontics Invited Lecture*, Department of Restorative Dentistry, Rutgers School of Dental Medicine, Newark, NJ, USA. December 6, 2019.
31. Sadr A. Direct Bonding: The Latest Evidence. Invited Speaker, *LA International Restorative Dentistry Symposium*, Los Angeles, CA, USA. November 1-2, 2019.
32. Sadr A. Restoration of Structurally Compromised Teeth with Direct Adhesive Technology, Hands-on Workshop, *King Abdulaziz University 5th International Dental Conference*, Jeddah, Saudi Arabia. October 21-24, 2019.
33. Sadr A. The updated curriculum of operative dentistry at University of Washington. Invited Speaker, *King Abdulaziz University 5th International Dental Conference*, Jeddah, Saudi Arabia. October 21-24, 2019.
34. Sadr A. Recent Updates in Adhesive and Preventive Dentistry. Full day CE course, *The Fifth Quarter Seminars*, Lake Tahoe, NV, USA. August 10, 2019.
35. Sadr A. Real-time 3D Imaging of Gap and Crack Development in Composites. OCT in Dentistry Satellite Symposium Speaker. *97th General Session & Exhibition of the IADR*, Vancouver, BC, Canada. June 18, 2019.
36. Sadr A. Proof-of-concept research for clinically successful bonding. Speaker and Chair, *The 2019 International Congress on Adhesive Dentistry*, Seattle, WA, USA. June 16, 2019.
37. Sadr A. Minimally invasive dentistry in light of technology. Invited Speaker. *Annual Meeting of the Academy of Biomimetic Dentistry*, Dallas, TX, USA. April 23, 2019.
38. Sadr A. The new operative dentistry curriculum at University of Washington School of Dentistry. CDE Speaker, *UW Service Learning Rotations Calibration Meeting*. Seattle, WA, USA. February 28, 2019.
39. Sadr A. Minimally invasive dentistry in light of Adhesive and CAD/CAM Technology. Keynote Speaker, *Taiwan Academy of Operative Dentistry Annual Meeting*, Tainan, Taiwan. October 28, 2018.
40. Sadr A. Understanding dental bonding from the Optical Coherence Tomography point of view. Invited Speaker. *Hokkaido University Summer Institute Program*, Sapporo, Hokkaido, Japan. August 21-23, 2018.
41. Sadr A. Clinical Perspective and Evidence Update on the Dental Sealants. Invited Speaker. *National Medicaid Oral Health Symposium*, Washington DC, USA. June 5, 2018.
42. Sadr A. Shrinkage Stress-management by Fiber-reinforced Direct Composite. Invited Speaker. *Annual Meeting of the Academy of Biomimetic Dentistry*, Dallas, TX, USA. March 10, 2018.
43. Sadr A. Minimally Invasive Dentistry in Everyday Practice, One-day Program, *Hebei Bureau of Foreign Experts*, Shijiazhuang, China. Jan 14, 2018.
44. Sadr A. Dental Education Curriculums in the United States and Japan: CODA vs. Model Core Curriculum. Invited Lecture, *National Curriculum Meeting*, Tokyo Medical and Dental University, Tokyo, Japan. Jan 10, 2018.
45. Sadr A. OCT, the desirable dental research gadget. Invited Lecture, *The Second International Symposium on OCT in Dentistry*, Okayama University, Okayama, Japan. Nov 30, 2017.
46. Sadr A. The Future of Dentistry in the Light of Optical Technologies. Invited Lecture, *Optical Society of America Travelling Lecturer Program, TMDU OSA Chapter*, Tokyo, Japan. Oct 6, 2017.
47. Sadr A. Restorative Management of Fearful Dental Patients, Invited Lecture, *Nanchang University*, Nanchang, China. Sep 18, 2017.
48. Sadr A. Minimally Invasive Dentistry Meets Research. Distinguished Lecture, *34th Meeting of SBPqO, the Brazilian Division of IADR*, Campinas, Brazil. Sep 4, 2017.
49. Sadr A. From Ohaguro to Saforide. Future of SDF Satellite Symposium Speaker, *95th General Session & Exhibition of the IADR*, San Francisco, CA. March 24, 2017.
50. Sadr A. Antibacterial and Bioactive Dental Restorative Materials: Do They Really Work? Symposium Speaker, *94th General Session & Exhibition of the IADR*, Seoul, Korea. June 24, 2016.
51. Sadr A. Achieving best adhesion by current materials. Invited Speaker, *Faculty of Dentistry at Piracicaba, University of Campinas*, Sao Paulo, Brazil. June 10, 2016.
52. Sadr A. A non-invasive method to control the quality of composite restorations. Invited Speaker, *University of Sao Paulo*, Sao Paulo, Brazil. June 8, 2016.
53. Sadr A. Estudo da união denteresina com tomografia de coerência óptica (in symposium: an update to adhesive and esthetic restorative dentistry). Invited Speaker, *University of Vale do Itajaí*, Santa Catarina, Brazil. June 6, 2016.
54. Sadr A. Role of Saliva in Maintenance and Repair of Tooth Enamel. Invited Speaker, 2015. *North American Saliva Symposium*, Seattle, WA, USA. December 6, 2015.
55. Sadr A. Creating Gap-free Composite Fillings: Incremental vs. Bulk-filled Composites. Invited Speaker, 2015. *Annual Meeting of the Academy of Biomimetic Dentistry*, Philadelphia, PA, USA. October 18, 2015.
56. Sadr A. Non-destructive Evaluation of Bonded Interfaces. Invited Speaker, 2015 *Biennial Meeting of International Academy for Adhesive Dentistry*, Orlando, FL, USA. September 11, 2015.
57. Sadr A. Overcoming microleakage in composite restorations: the missing links. *The 55th Annual International Congress and General Meeting of the Iranian Dental Association, IDA*, Tehran, Iran. May 10, 2015.
58. Sadr A. Real-time Imaging of Composites by Optical Coherence Tomography. *Lunch and Learning Program, IADR/AADR General Meeting*, Boston, MA, USA. March 12, 2015.

59. Sadr A. Advanced Dental Composites: Technology-driven Esthetics and Performance. Invited Speaker, *Philippine Society of Periodontology*, Manila, Philippine. February 24, 2015.
60. Sadr A. Gold standard self-etch adhesives: Beyond MDP. Keynote Address at *IAD Post-congress Meeting*, Mahidol University, Bangkok, Thailand. February 2, 2015.
61. Sadr A. Adhesives, Polymerization Shrinkage and Sealing: The Missing Link. Invited Speaker, *The 6th International Congress on Adhesive Dentistry*, Bangkok, Thailand. February 1, 2015.
62. Sadr A. Minimally Invasive Esthetic Restorative Dentistry: Science Meets Practice, *2015 Meeting of Iranian General Dentists Association*, Tehran, Iran. January 15, 2015.
63. Sadr A. Optical coherence tomography as a new tool for evaluation of dental materials and caries. Invited Seminar, *University of Washington School of Dentistry*, Seattle, WA. August 20, 2014.
64. Sadr A. Direct composite restorations: an update. Invited Speaker, *Mashhad School of Dentistry*, Mashhad, Iran. August 4, 2014.
65. Sadr A. Recent dental composites; can we eventually bulk-fill? Invited Speaker, *The Master Course on Composite Restorations, Tokuyama Dental*, Tokyo, Japan. May 23, 2014.
66. Sadr A. Evaluation of composite restorations in vitro by OCT and its clinical relevance. Invited Speaker, *Continuing Education Course of Dental Alumni Association, Tokyo Medical and Dental University*, Tokyo, Japan. May 18, 2014.
67. Sadr A. Takagaki T. Layering technique for esthetic restoration of anterior teeth by supra-nano filled dental composites, Joint Workshop Speaker, *The 54th International Congress of the IDA*, Tehran, Iran. May 8, 2014.
68. Sadr A. New advancements in the management of dental caries, Invited Speaker, *The 54th Annual International Congress and General Meeting of the Iranian Dental Association, IDA*, Tehran, Iran. May 7, 2014.
69. Sadr A. Optical Coherence Tomography (OCT), a Unique Technique for Evaluation of Composite Restorations, Invited Speaker, *Distinguished Scientist Lecture Series, University of Florida*, Gainesville, FL. March 25, 2014.
70. Sadr A. Non-ionizing In-depth Dental Imaging by Optical Coherence Tomography: A Benchtop to Chairside Development Story, Invited Speaker, *TMDU International Summer Program*, Tokyo, Japan, August 27, 2013.
71. Sadr A. Time-resolved and Quantitative Analysis of Dental Structures by OCT, Invited Speaker, *1st International Symposium on Optical Coherence Tomography in Dentistry*, Tokyo, Japan, June 20, 2013.
72. Sadr A. Factors affecting the success of bulk-filled composites, Invited R&D Seminar, *Dentsply Caulk, Milford, DE*, June 13, 2013.
73. Sadr A. Optical Coherence Tomography from Basic Research to Clinical Applications, Invited Speaker, *Continuing Education Program (accredited), University of Southern California*, Los Angeles, CA, USA, September 19, 2012.
74. Sadr A. Optical Coherence Tomography for Diagnosis and Monitoring of Caries Lesions, Invited Speaker, *Faculty Development Program, University of British Columbia*, Vancouver, Canada, May 23, 2012.
75. Sadr A. The utility of SS-OCT for research and development of new composite materials. Invited Seminar, *Tsukuba Dental R&D Center, Tokuyama Corp.*, Tokyo, Japan, December 12, 2011.
76. Sadr A. Innovative research on the characterization of dental restorative composite materials, *89th Open Seminar of Tooth and Bone GCOE, IRCMSTBD, Tokyo Medical and Dental University*, Tokyo, Japan, November 14, 2011.
77. Sadr A. Ultra-morphological and Nanomechanical Characterization of Reinforced Enamel and Dentin by Self-etch Adhesives: The Super Tooth, Invited Speaker, *7th International Conference on Diffusion in Solids and Liquids*, Algarve, Portugal, June 24, 2011.
78. Sadr A. Optical properties of enamel and dentin, 65th Open Session of the Tooth and Bone GCOE, *IRCMSTBD, Tokyo Medical and Dental University*, Tokyo, Japan, November 15, 2011.
79. Sadr A. Optical Coherence Tomography in Dentistry. *TMDU-UIC Restorative Dentistry Pre-IADR Symposium*, Barcelona, Spain, July 14, 2010.
80. Sadr A. Optical Coherence Tomography (OCT): Non-invasive Diagnosis for Dentistry, *33rd Open Session of Tooth and Bone GCOE, IRCMSTBD, Tokyo Medical and Dental University*, Tokyo, Japan July 6, 2009.
81. Sadr A. Bonding; new findings and principles of a successful restoration. *The 49th Annual International Congress and General Meeting of the Iranian Dental Association, IDA*, Tehran, Iran. May 7, 2009.
82. Sadr A. Material Testing in Dentistry, *School of Mechanical and Aerospace Engineering, Oklahoma State University*, Stillwater, OK, USA. March 20, 2007.