

ABSTRACT ID	TITLE	PRESENTER	VIRTUAL SESSION TITLE	DATE	TIME	VIRTUAL ROOM	PRESENTATION TYPE
<mark>AWARD LECTU</mark> 3455318	Glass scaffolds for bone tissue	Antoni Pawel Tomsia,	Stookey Lecture of Discovery	Mon., Aug. 3	10:05 – 10:45 AM	Queen Anne Ballroom	Award Lecture
J4JJJ10	engineering	Lawrence Berkeley National Laboratory	Stookey Lecture of Discovery	Woll., Aug. 3	10.03 – 10.43 AW	Queen Aime Bailloom	Awaru Lecture
3342467	Broadband Transparent Optical Phase Change Material Enabled Nonvolatile Photonics	Yifei Zhang , Massachusetts Institute of Technology	Norbert J. Kreidl Award for Young Scholars	Tues., Aug. 4	10:05 – 10:45 AM	Queen Anne Ballroom	Award Lecture
3407289	Idea to Innovation of Optical fibers	Younes Messaddeq, Université Laval	Varshneya Glass Technology lecture	Wed., Aug. 5	10:05 – 10:45 AM	Queen Anne Ballroom	Award Lecture
3465443	Thermodynamics and kinetics of batch melting	Reinhard Conradt, uniglassAC GmbH	L. David Pye Lifetime Achievement Award	Wed., Aug. 5	10:05 – 10:35 AM	Royal D	Award Lecture
CVMDOCILIM 1	(Fundamentals of the Glassy State)						
3343507	Teaching Reverse Monte Carlo to	Bishal Bhattarai,	Atomistic Simulation and Predic-	Mon., Aug. 3	11 – 11:30 AM	Royal Salon	Invited
3342586	respect Chemistry: A new method The Energy Landscape Governs	Ohio University Longwen Tang,	tive Modeling of Glasses I Atomistic Simulation and Predic-	Mon., Aug. 3	11:30 – 11:50 AM	Royal Salon	Contributed
JJ42300	Brittleness and Ductility in Glasses	University of California, Los Angeles	tive Modeling of Glasses I	Widii., Aug. 3	11.50 11.50 AW	Noyal Jaion	Contributed
3368374	Understanding the structural roles of ferrous (Fe2+) and ferric (Fe3+) ions in boro-aluminosilicate glasses using molecular dynamics simulations	Manzila Islam Tuheen, University of North Texas	Atomistic Simulation and Predictive Modeling of Glasses I	Mon., Aug. 3	11:50 – 12:10 PM	Royal Salon	Contributed
3369093	Investigation of Rate-dependent Ductility of Glassy Nanowire via Accelerated Molecular Simulation	Yanming Zhang, Rensselaer Polytechnic Institute	Atomistic Simulation and Predictive Modeling of Glasses I	Mon., Aug. 3	12:10 – 12:30 PM	Royal Salon	Contributed
3343681	Molecular dynamics simulations and Quantitative Structural Property Relationship analysis of multi- component aluminosilicate and borosilicate glasses	Jincheng Du , University of North Texas	Atomistic Simulation and Predictive Modeling of Glasses II	Mon., Aug. 3	1:30 – 2 PM	Royal Salon	Invited
3368686	Molecular dynamics simulation of the composition-structure- properties relationship in alkaline earth silicates/borates	Yueh-Ting Shih , Rensselaer Polytechnic Institute	Atomistic Simulation and Predictive Modeling of Glasses II	Mon., Aug. 3	2 – 2:20 PM	Royal Salon	Contributed
3343687	Exploring the Landscape of Buckingham Potentials for Silica by Machine Learning: Soft vs. Hard Interatomic Forcefields	Han Liu, UCLA	Atomistic Simulation and Predictive Modeling of Glasses II	Mon., Aug. 3	2:20 – 2:40 PM	Royal Salon	Contributed
3465558	Computer modelling of the thermal conductivity of amorphous materials	Jamieson K Christie, Loughborough University	Atomistic Simulation and Predictive Modeling of Glasses II	Mon., Aug. 3	2:40 – 3 PM	Royal Salon	Contributed
3390453	Machine learning in materials design: Challenges and opportunities	Bryce Meredig, Citrine Informatics	Data-based Modeling and Machine Learning for Glass Science I	Mon., Aug. 3	11 – 11:30 AM	Royal C	Invited
3365550	Topology-Informed Machine Learning for Discovering new Glasses with Tailored Properties	Mathieu Bauchy, University of California, Los Angeles	Data-based Modeling and Machine Learning for Glass Science I	Mon., Aug. 3	11:30 AM- Noon	Royal C	Invited
3341131	Regular and explainable ML algorithms for the prediction of glass properties	Edgar Dutra Zanotto , Federal University of São Carlos	Data-based Modeling and Machine Learning for Glass Science I	Mon., Aug. 3	Noon – 12:30 PM	Royal C	Invited
3343782	Predicting the Poisson's Ratio of Oxide algorithms for the prediction of glasses using Machine Learning	Kai Yang , University of California, Los Angeles	Data-based Modeling and Machine Learning for Glass Science II	Tues., Aug. 4	11 – 11:20 AM	Royal C	Contributed
3343719	Information-Driven Refinement of the Atomic Structure of Silicate Glasses	Qi Zhou , University of California, Los Angeles	Data-based Modeling and Machine Learning for Glass Science II	Tues., Aug. 4	11 – 11:40 AM	Royal C	Contributed
3343683	Finding Needles in Haystacks: Structural Signature of Glass	Han Liu, UCLA	Data-based Modeling and Machine Learning for Glass Science II	Tues., Aug. 4	11:40 AM — Noon	Royal C	Contributed
3341242	Dynamics by Machine Learning "Ideal Glass Transition" Viewed as a First-Order Quantum Phase Transition Between Crystalline and Glassy Solids in 4D/3D Quaternion Ordered Systems	Caroline Gorham, Carnegie Mellon University	Glass Formation and Structural Relaxation I	Mon., Aug. 3	11 – 11:20 AM	Royal D	Invited
3338087	Structural relaxation in glasses: The influence of external factors	Roman Golovchak, Austin Peay State University	Glass Formation and Structural Relaxation I	Mon., Aug. 3	11:20 – 11:50 AM	Royal D	Invited
3344037	What Determines the Fragility of a Network-forming Glass?	David Sidebottom, Creighton University	Glass Formation and Structural Relaxation II	Mon., Aug. 3	1:30 – 2 PM	Royal D	Invited
3340720	Dilatometric Fragility and Prediction of the Viscosity Curve of Glass-Forming Liquids	Linfeng Ding, The Pennsylvania State University	Glass Formation and Structural Relaxation II	Mon., Aug. 3	2 – 2:20 PM	Royal D	Contributed
3369096	Calculating Viscosity of Glass Forming Liquids Near Tg Using Molecular Dynamics Simulation	Yanming Zhang, Rensselaer Polytechnic Institute	Glass Formation and Structural Relaxation II	Mon., Aug. 3	2:20 – 2:40 PM	Royal D	Contributed
3342709	Temperature rise upon shear of Vickers indentation for soda lime silicate glass with metal coating	Hongshen Liu , Penn State University	Mechanical Properties of Glasses I	Mon., Aug. 3	11 – 11:20 AM	Queen Anne B	Contributed
3342695	Photo-elastic confirmation of fast surface relaxation of silica glasses	Bronson D Hausmann, Rensselaer Polytechnic	Mechanical Properties of Glasses I	Mon., Aug. 3	11:20 – 11:40 AM	Queen Anne B	Contributed
3365216	in the presence of water Fatigue Dependence on Flaw Size with Glass Type	Institute Garth Scannell, Corning Incorporated	Mechanical Properties of Glasses I	Mon., Aug. 3	11:40 AM – Noon	Queen Anne B	Contributed
3342069	Sapphire AMP: Wet etch to expose sub- surface damage and increase laser damage resistance and mechanical strength	Tayyab I Suratwala, Lawrence Livermore National Laboratory	Mechanical Properties of Glasses I	Mon., Aug. 3	Noon – 12:20 PM	Queen Anne B	Contributed



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SYMPOSIUM 1 3342447	(Fundamentals of the Glassy State) Mechanical toughness of the metal- nanoparticle-implanted glass, its mechanical strength and the dependence on the preparation conditions	Madoka Ono , Hokkaido University	Mechanical Properties of Glasses II	Tues., Aug. 4	11 –11:30 AM	Queen Anne B	Invited
3343211	Overcoming the Brittleness of Glass by Nanoscale Phase Separation	Longwen Tang , University of California, Los Angeles	Mechanical Properties of Glasses II	Tues., Aug. 4	11:30 – 11:50 AM	Queen Anne B	Contributed
3342063	Compositional Dependence of Inelastic Energy Dissipation in Calcium Aluminosilicate Glasses	Maryam Kazembeyki, Arizona State University	Mechanical Properties of Glasses II	Tues., Aug. 4	11:50 AM – 12:10 PM	Queen Anne B	Contributed
3344307	Compositional Dependency of Inelastic Dissipation Mechanisms During Scratching in CAS Glasses	Christian G Hoover, Arizona State University	Mechanical Properties of Glasses II	Tues., Aug. 4	12:10 – 12:30 PM	Queen Anne B	Contributed
3342811	Crystal Nucleation in Silicate Glasses	Kenneth F. Kelton, Washington University	Fundamentals of Crystallization	Wed., Aug. 5	11 – 11:30 AM	Royal B	Invited
3342501	Seeded crystallization in supercooled Lennard-Jones and Germanium liquids: Computer simulation and Classical Nucleation Theory analysis	Azat Tipeev, Federal University of São Carlos	Fundamentals of Crystallization	Wed., Aug. 5	11:30 AM – Noon	Royal B	Invited
3463974	Off-stoichiometry effects on crystal nucleation and growth kinetics in combeite (Na2O·2CaO·3SiO2) – devitrite (Na2O·3CaO·6SiO2) glasses	Guilherme S Macena, University of São Paulo	Fundamentals of Crystallization	Wed., Aug. 5	Noon – 12:20 PM	Royal B	Contributed
3465051	Nepheline crystallization in low phosphate-content SiO ₂ -Al ₂ O3-Na ₂ O-P ₂ O5 glasses	Franziska Scheffler, Friedrich-Schiller- Universität Jena	Fundamentals of Crystallization	Wed., Aug. 5	12:20 – 12:40 PM	Royal B	Contributed
3344407	What Does Topology Have To Do With It? Application of Topological Constraint Theory to Amorphous Semiconductors and Dielectrics	Michelle Paquette , University of Missouri- Kansas City	Topology and Rigidity	Wed., Aug. 5	11 – 11:30 AM	Queen Anne A	Invited
3329442	Observation of a Reversibility-, Fragility- and Volumetric windows in specially homogenized equimolar GexAsxS100-2x glasses	Badriah Almutairi , University of Cincinnati	Topology and Rigidity	Wed., Aug. 5	11:30 – 11:50 AM	Queen Anne A	Contributed
3340840	Statistical Mechanical Model of Topological Fluctuations and Atomic Rearrangement in Binary Phosphate Glasses	Katelyn Alyssa Kirchner, Pennsylvania State University	Topology and Rigidity	Wed., Aug. 5	11:50 AM – 12:10 PM	Queen Anne A	Contributed
3342965	Thermodynamic Implications of Fluctuations in Glass-Forming Systems	Katelyn Alyssa Kirchner, Pennsylvania State University	Topology and Rigidity	Wed., Aug. 5	12:10 – 12:30 PM	Queen Anne A	Contributed
3343722	Topological Origin of the Low Thermal Expansion of Glassy Silica	Qi Zhou , University of California, Los Angeles	Topology and Rigidity	Wed., Aug. 5	12:30 – 12:50 PM	Queen Anne A	Contributed
3371566	Rare Earth Partitioning in Glass- Ceramics	Matt Dejneka, Corning Incorporated	Applications and Glass-ceramics	Wed., Aug. 5	1:30 –2 PM	Royal B	Invited
3372211	Nanocrystallization of NaYF4 in fluoroborate glasses in melt-cooling process and the impact of glass structure	Kenji Shinozaki , AIST	Applications and Glass-ceramics	Wed., Aug. 5	2 – 2:20 PM	Royal B	Contributed
3369028	Mechanical Properties of Glass- Ceramics	Francisco Carlos Serbena, State University of Ponta Grossa	Applications and Glass-ceramics	Wed., Aug. 5	2:20 – 2:50 PM	Royal B	Invited
3342442	Mechanical properties of CaO-Al ₂ O ₃ -SiO2 glass-ceramics precipitating different amount of hexagonal-CaAl2Si2O8 crystals	Kei Maeda, AGC Inc.	Applications and Glass-ceramics	Wed., Aug. 5	3 – 3:30 PM	Royal B	Invited
3368429	In-situ synchrotron radiation X-ray diffraction study of the crystalli- zation behaviors of Li1+xAlxGe2-x(PO4)3 glass- ceramic solid-state electrolyte	Po Hsuen Kuo , University of North Texas	Applications and Glass-ceramics	Wed., Aug. 5	3:30 – 3:50 PM	Royal B	Contributed
3466131	Recalescence in silicate melts and volcanological implications	Alan Whittington, University of Texas at San Antonio	Applications and Glass-ceramics	Wed., Aug. 5	3:50 – 4:10 PM	Royal B	Contributed
3467652	Effect of niobium content on structure, dielectric, and energy storage behaviors of the glass- ceramics obtained from silver- niobium-phosphate glasses	Sanaa Benyounoussy, University Hassan II Casablanca	Applications and Glass-ceramics	Wed., Aug. 5	4:10 – 4:30 PM	Royal B	Contributed
3368284	A Structural Study of Alkali Tellurite Silicate Glasses	Makyla Boyd , Coe College	Structure of Non Silicate and Glasses	Wed., Aug. 5	1:30 – 1:50 PM	Royal Salon	Contributed
3342386	Structure and Bonding in TeO2 Melt and Glass	Oliver L G Alderman, Rutherford Appleton Laboratory	Structure of Non Silicate and Glasses	Wed., Aug. 5	1:50 – 2:10 PM	Royal Salon	Contributed
3341751	Structural investigation of Na-based binary silicates prepared by liquid route	Hamza Mohsin, Saint- Gobain	Structure of Non Silicate and Glasses	Wed., Aug. 5	2:10 – 2:30 PM	Royal Salon	Contributed
3344218	Effect of glass composition on fictive-temperature dependent glass properties	Alexandra Mitchell, Corning Incorporated	Structure of Non Silicate and Glasses	Wed., Aug. 5	2:30 – 2:50 PM	Royal Salon	Contributed



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SYMPOSIUM 1	(Fundamentals of the Glassy State)						
3369045	Pressure Processing to Access New Glassy States	Liping Huang , Rensselaer Polytechnic Institute	Glass Under Extreme Conditions	Wed., Aug. 5	3 – 3:20 PM	Royal Salon	Contributed
3342448	Suppression of optical loss in pressure-quenched silica glass: Modeling and experimental results	Madoka Ono , Hokkaido University	Glass Under Extreme Conditions	Wed., Aug. 5	3:20 – 3:40 PM	Royal Salon	Contributed
3344334	Composition and pressure effects on the structure, elastic properties and hardness of aluminoborosilicate glass	Jingshi Wu , Corning Research and Develop- ment Corporation	Glass Under Extreme Conditions	Wed., Aug. 5	3:40 – 4:10 PM	Royal Salon	Invited
3368396	Permanently densified soda lime glass in hydrostatic conditions: Calibration curve density versus Raman shift, Brillouin shift or Eu3+ and Nd3+ emission	Ferdinand Werr, University Erlangen- Nürnberg	Glass Under Extreme Conditions	Wed., Aug. 5	4:10 – 4:30 PM	Royal Salon	Contributed
YMPOSIUM 2	(Glass and Water: Degradation of Ar	norphous Materials)					
3343933	Effect of changes in solution conditions on mechanical stability of the alteration layer	Huseyin Kaya , Pennsylvania State University	Glass-Water Interactions for Long-Term Durability	Mon. , Aug. 3	11 – 11:20 AM	Queen Anne A	Contributed
3340990	In search of a reliable method to quantify an apparent equilibrium constant for glass dissolution	Jim Neeway, Pacific Northwest National Lab	Glass-Water Interactions for Long-Term Durability	Mon. , Aug. 3	11:20 – 11:40 AM	Queen Anne A	Contributed
3338286	Near Field Interactions of Glass Waste Form and Stainless Steel Canisters	Xiaolei Guo , Ohio State University	Glass-Water Interactions for Long-Term Durability	Mon. , Aug. 3	11:40 AM – 12:10 PM	Queen Anne A	Invited
3465566	Structure-bioactivity relationships in bioactive glass from simulation	Jamieson K Christie, Loughborough University	Structure and Properties of Bioactive Glasses	Mon., Aug. 3	1:30 – 1:50 PM	Queen Anne Ballroom	Contributed
3373374	Bioactive glasses with tuned ion releasing capability as versatile biomaterials for tissue engineering	Aldo R. Boccaccini, Institute of Biomaterials, Department of Materials Science and Engineering, Friedrich Alexander, University Erlangen- Nuremberg	Structure and Properties of Bioactive Glasses	Mon., Aug. 3	1:50 – 2:10 PM	Queen Anne Ballroom	Contributed
3464094	Influence of the P2O5 content on the microstructure in bioactive glass-ceramics in the system SiO2-P2O5-CaO-CaF2	Araceli de Pablos-Martín, Friedrich Schiller University	Structure and Properties of Bioactive Glasses	Mon., Aug. 3	2:10 – 2:30 PM	Queen Anne Ballroom	Contributed
3465665	Visualising the crystallization of 45S5 type bioactive glasses	Altair T. Contreras Jaimes, Friedrich-Schiller- Universität Jena	Structure and Properties of	Mon., Aug. 3	2:30 – 2:50 PM	Queen Anne Ballroom	Contributed
3466121	In vitro bioactivity of silicon oxycarbide-based bioactive glasses for bone regeneration	Marcela Arango-Ospina, University of Erlangen- Nürnberg	Structure and Properties of Bioactive Glasses	Mon., Aug. 3	2:50 – 3:10 PM	Queen Anne Ballroom	Contributed
3343878	Initial dissolution rate measure- ments of simulated UK Ca/Zn HLW glass in conditions relevant to disposal	Mike T Harrison, National Nuclear Laboratory	Glass-water Interfaces I	Tues., Aug. 4	11 – 11:20 AM	Queen Anne A	Contributed
3344066	Investigating the dissolution behavior of Na-Mo-Fe-phosphate glasses in aqueous solutions	Jincheng Bai, Missouri University of Science & Technology Missouri University of Science & Technology	Glass-water Interfaces I	Tues., Aug. 4	11:20 – 11:40 AM	Queen Anne A	Contributed
3344382	Measurement of Confined Geometry pH Conditions at Metal and Glass Interface	Xiaolei Guo , Ohio State University	Glass-water Interfaces I	Tues., Aug. 4	11:40 AM – 12:00 PM	Queen Anne A	Contributed
3338404	Multi-scale transport and textural properties of Si-rich amorphous interfacial layers	Bastien Wild , Princeton University	Glass-water Interfaces I	Tues., Aug. 4	Noon – 12:30 PM	Queen Anne A	Invited
3368392	Reaction mechanisms and inter- facial behaviors of sodium silicate glass in an aqueous environment from reactive force field-based molecular dynamics simulations	Lu Deng , University of North Texas	Glass-water Interfaces II	Tues., Aug. 4	1:30 – 1:50 PM	Queen Anne A	Contributed
3369036	Measuring energy barriers for hydration reactions on sodium aluminum silicates by potential of mean force methods	Thiruvilla S Mahadevan, University of North Texas	Glass-water Interfaces II	Tues., Aug. 4	1:50 – 2:10 PM	Queen Anne A	Contributed
3343688	Predicting the Dissolution Kinetics of Silicate Glasses by Topology- Informed Machine Learning	Han Liu, UCLA	Glass-water Interfaces II	Tues., Aug. 4	2:10 – 2:30 PM	Queen Anne A	Contributed



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SYMPOSIUM 2 3341536	(Glass and Water: Degradation of An Atomistic computer simulations	Jessica Marie Rimsza,	Glass Dissolution	Tues., Aug. 4	1:30 – 2 PM	Queen Anne Ballroom	Invited
2242040	of dissolution of inorganic glasses	Sandia National Laboratories			2 22214		
3343918	Dissolution of Na-Ca- Borophosphate Glasses in Aqueous Solutions	Richard Brow, Missouri S&T	Glass Dissolution	Tues., Aug. 4	2 – 2:20 PM	Queen Anne Ballroom	Contributed
3344300	lon release from bioactive glasses in static and dynamic aqueous environments	Leena Hupa , Åbo Akademi University	Glass Dissolution	Tues., Aug. 4	2:20 – 2:40 PM	Queen Anne Ballroom	Contributed
3343996	Influence of Tris(hydroxymethyl) aminomethane buffer solution chemistry on the dissolution behavior of borosilicate based model bioactive glass	Nicholas Stone-Weiss, Rutgers University	Glass Dissolution	Tues., Aug. 4	2:40 – 3:00 PM	Queen Anne Ballroom	Contributed
3344401	Topological Control on the Dissolution Kinetics of Bioactive Glasses	Mathieu Bauchy, University of California, Los Angeles	Soluble Glasses and Glasses as Ion Release Devices	Wed., Aug. 5	11 – 11:30 AM	Queen Anne Ballroom	Invited
3341763	P-31 NMR study of phosphate glass dissolution	Delia S Brauer, Friedrich- Schiller-Universität	Soluble Glasses and Glasses as Ion Release Devices	Wed., Aug. 5	11:30 – 11:50 AM	Queen Anne Ballroom	Contributed
3344459	The in vitro osteogenic and anti- bacterial effects of strontium chloride-containing bioactive glasses	Xiaojing Chen, Central South University	Soluble Glasses and Glasses as Ion Release Devices	Wed., Aug. 5	11:50 AM — 12:10 PM	Queen Anne Ballroom	Contributed
3343999	Ion dissolution from silicate glass microspheres	Polina Sinitsyna , Åbo Akademi University	Soluble Glasses and Glasses as Ion Release Devices	Wed., Aug. 5	12:10 – 12:30 PM	Queen Anne Ballroom	Contributed
SYMPOSIUM 3	(Optical and Electronic Materials and	d Devices - Fundamentals	and Applications)				
3342005	A hybrid chalcogenide-on-silicon platform for nonlinear photonics	Juejun Hu , Massachusetts Institute of Technology	Hybrid and Composite Optical Materials	Mon., Aug. 3,	1:30 – 1:50 PM	Royal B	Contributed
3343965	Robust plasmonic glasses using nanoporous titanium dioxide embedded with gold nanoparticles (Au NPs)	Ajay Peter Manuel , University of Alberta	Hybrid and Composite Optical Materials	Mon., Aug. 3,	1:50 – 2:10 PM	Royal B	Contributed
3344009	Core-shell titanium dioxide@titanium nitride nanotube arrays for optical limiters and near-infrared sensitive optoelectronics	Sheng Zeng , University of Alberta	Hybrid and Composite Optical Materials	Mon., Aug. 3,	2:10 – 2:30 PM	Royal B	Contributed
3344068	Chalcogenide Phase-change Reconfigurable Metamaterials	Behrad Gholipour, University of Alberta	Phase Change Materials and Devices	Mon., Aug. 3	2:40 – 3:00 PM	Royal B	Contributed
3342757	Transient Couplers Based on Phase Change Materials for Wafer-scale Photonic Testing	Yifei Zhang, Massachusetts Institute of Technology	Phase Change Materials and Devices	Mon., Aug. 3	3 – 3:20 PM	Royal B	Contributed
3343048	Information integrated glass module fabricated by integrated additive and subtractive manufacturing	Qi Zhang , Clemson University	Materials for Advanced Optics	Mon., Aug. 3	3:30 – 3:50 PM	Royal B	Contributed
3344957	Mid-IR metasurface optics based on chalcogenide thin films	Juejun Hu, Massachusetts Institute of Technology	Materials for Advanced Optics	Mon., Aug. 3	3:50 – 4:10 PM	Royal B	Contributed
3302249	Optical properties of phosphate glasses melted with different allotropes of carbon	José A Jiménez, Augusta University	Rare-earth and Transition Metal- doped Glasses and Ceramics for Photonic Applications	Tues., Aug. 4	1:30 – 1:50 PM	Royal B	Contributed
3341178	Enhanced emissions of Er3+ by energy transfer from ZnSe quantum dots embedded in borosilicate glass	Nilanjana Shasmal, Federal University of São Carlos	Rare-earth and Transition Metal- doped Glasses and Ceramics for Photonic Applications	Tues., Aug. 4	1:50 – 2:10 PM	Royal B	Contributed
3343359	Enhancement and tuning of photo- luminescence in nanometal embedded Pr3+ doped chloroboro- silicate glass and glass-ceramics	Nilanjana Shasmal, Federal University of São Carlos	Rare-earth and Transition Metal- doped Glasses and Ceramics for Photonic Applications	Tues., Aug. 4	2:10 – 2:30 PM	Royal B	Contributed
3344054	Rare Earth Doped Yttria Transparent Ceramics for Quantum Memory Studies	Haitao Zhang , Corning Incorporated	Rare-earth and Transition Metal- doped Glasses and Ceramics for Photonic Application	Tues., Aug. 4	2:30 – 3 PM	Royal B	Invited
3341171	Effects of structural disorder on two-photon absorption in chalcogenide glass	Nikita S. Dutta, Princeton University	Laser Interactions with Glasses	Tues., Aug. 4	1:30 – 1:50 PM	Queen Anne B	Contributed
3343898	Direct Evidence of the Origin of Rotation in Laser-fabricated Rotating Lattice Single Crystals in Glass	Evan Musterman , Lehigh University	Laser Interactions with Glasses	Tues., Aug. 4	1:50 – 2:10 PM	Queen Anne B	Contributed
3343381	Processing and properties of solution based chalcogenide films for direct laser writing of 3D micro-structures	Casey Schwarz, Ursinus College	Laser Interactions with Glasses	Tues., Aug. 4	2:10 – 2:30 PM	Queen Anne B	Contributed
3344327	Structural/Chemical properties of CAS glass surfaces and their impact on reactive processes: A Molecular Dynamics and experimental study	Gabriel Agnello, Corning Incorporated	Charge and Energy Transport in Disordered Materials	Wed. , Aug. 5	11 – 11:20 AM	Royal Salon	Contributed
3368543	Structure and lithium ion transport in the glassy, crystal phases and their interfaces of lithium aluminum germanium phosphate glass-ceramic solid electrolyte	Po Hsuen Kuo , University of North Texas	Charge and Energy Transport in Disordered Materials	Wed. , Aug. 5	11:20 – 11:40 AM	Royal Salon	Contributed
3369015	Molecular Dynamics Probe into Ionic Conduction Mechanism in Oxide Glasses	John Kieffer , University of Michigan	Charge and Energy Transport in Disordered Materials	Wed. , Aug. 5	11:40 AM – Noon	Royal Salon	Contributed



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SYMPOSIUM 4	(Glass Technology and Cross-Cutting	J Topics)					
3465443	Thermodynamics and kinetics of batch melting	Reinhard Conradt, uniglassAC GmbH	Challenges in Manufacturing	Wed., Aug. 5	10:05 – 10:35 AM	Royal D	Award Lecture
3344226	In-situ visual observations of glass melting processes	Jose Marcial , University of Chemistry and Technology, Prague	Challenges in Manufacturing	Wed., Aug. 5	10:35 – 11:05 AM	Royal D	Invited
3343742	Kinetics of batch-to-glass conversion	Richard Pokorny, University of Chemistry and Technology Prague	Challenges in Manufacturing	Wed., Aug. 5	11:15 – 11:45 AM	Royal D	Invited
3368073	Lowering your CO ₂ footprint	Erik Hendrikus Muijsenberg, Glass Service	Challenges in Manufacturing	Wed., Aug. 5	11:45 AM – 12:15 PM	Royal D	Invited
3368341	Innovations in Glassy Surface Characterization: An IR / THz Wave Spectroscopic Study of the Water- Silicate Interface	Ingrid Wilke , Rensselaer Polytechnic Institute	Water on Glass Surfaces, and Characterization Thereof	Wed., Aug. 5	11 – 11:30 AM	Queen Anne B	Invited
3344140	Hydrogen bonding deconvolution of the absorbed water on glass surfaces	Yen-Ting Lin , Pennsylvania State University	Water on Glass Surfaces, and Characterization Thereof	Wed., Aug. 5	11:30 – 11:50 AM	Queen Anne B	Contributed
3341609	Coordination State of Boron at Glass Surfaces, as a function of Glass Composition and Surface Preparation Method	Nicholas J Smith, Corning Incorporated	Water on Glass Surfaces, and Characterization Thereof	Wed., Aug. 5	11:50 AM – 12:10 PM	Queen Anne B	Contributed
3344345	Stress effect on ion migration and mechanochemical wear behavior of soda lime silicate glass by fourpoint bending	Hongshen Liu , Penn State University	Water on Glass Surfaces, and Characterization Thereof	Wed., Aug. 5	12:10 – 12:30 PM	Queen Anne B	Contributed
3387239	Forty years of practical experience designing multiple types of Silane deposition equipment working with multiple surfaces, multiple silanes coupled with water and plasma modification	William Andrew Moffat, Yield Engineering Systems	Glass Surface Texture and Coatings	Wed., Aug. 5	1:30 – 2:00 PM	Queen Anne B	Invited
3344171	AFM-IR analysis of glass surfaces: What are we measuring?	Yen-Ting Lin , Pennsylvania State University	Glass Surface Texture and Coatings	Wed., Aug. 5	2 – 2:20 PM	Queen Anne B	Contributed
3369141	Machine Learning for Glass Wasteforms' Design and Performance	Mathieu Bauchy, University of California, Los Angeles	Materials for Waste Immobilization	Wed., Aug. 5	1:30 – 2 PM	Royal C	Invited
3342819	Radiation damage effects in multiphase glass ceramic waste forms	Ming Tang, Clemson University	Materials for Waste Immobilization	Wed., Aug. 5	2 – 2:20 PM	Royal C	Contributed
3344100	Rheology of simulated low activity waste feeds during vitrification	Jaime George, Pacific Northwest National Lab	Materials for Waste Immobilization	Wed., Aug. 5	2:20 – 2:40 PM	Royal C	Contributed