

58th Rocky Mountain Conference on Magnetic Resonance
39th International EPR Symposium
Poster Presentations

Monday, July 18: 7:30-9:00 p.m. (Authors Present for Posters Labeled A)

Tuesday, July 19: 7:30-9:00 p.m. (Authors Present for Posters Labeled B)

A	EPR for a Cu₄S Model for Nitrous Oxide Reductase. <u>William E Antholine</u> , Medical College of Wisconsin
B	Chemical Influences on Quantum Coherence in Potential Molecular Qubits. <u>Katharina Bader</u> , University of Stuttgart
A	Triplet Exciton Generation in Materials for Organic Solar Cells. <u>Jan Behrends</u> , Freie Universität Berlin
B	A Digital Low-Field Dynamic Nuclear Polarization Spectrometer. <u>Joshua R. Biller</u> , National Institute of Standards and Technology
A	Utilizing Novel 95GHZ 2D-ESR Spectroscopy to Study Nitroxide Partitioning into the Lipid Membranes at Room Temperatures. <u>Siddarth Chandrasekaran</u> , ACERT and Cornell University
B	T-jump and Freeze-quench EPR. <u>Alexey V Cherepanov</u> , Goethe University
A	Distance Measurements in Gd³⁺-labeled Proteorhodopsin Oligomers by 240 GHz CW EPR. <u>Jessica Clayton</u> , University of California Santa Barbara
A	Silicon Carbide Magnetoresistive Magnetometer with Electrically Detected Magnetic Resonance Self-calibration Feature for Space Science Application. <u>Corey Cochrane</u> , California Institute of Technology, Jet Propulsion Laboratory
B	Highly Precise DEER Distance Measurements within Proteins using the Double Histidine Cu²⁺-Binding Motif. <u>Timothy F. Cunningham</u> , Hanover College
A	Towards Understanding the Orientation Dependence of NV-Mediated Bulk Nuclear Hyperpolarization in Diamond at High Magnetic Fields. <u>Melanie Drake</u> , University of California Berkeley
B	Bayesian Uncertainty Quantification For DEER Spectroscopy. <u>Thomas H. Edwards</u> , University of Washington
A	SpecMan4EPR: The Second Generation of AWG Engine. <u>Boris Epel</u> , University of Chicago
B	Interaction Between the Prion Protein's Copper-Bound Octarepeat Domain and a Charged C-terminal Pocket Suggests a Mechanism for N-terminal Regulation. <u>Eric GB Evans</u> , University of Washington
A	Nanoliter Biological Electron Paramagnetic Resonance Spectroscopy on a Diamond Chip. <u>Ilja Fescenko</u> , University of New Mexico
B	The SHARED EPR Network. <u>Gary J. Gerfen</u> , Albert Einstein College of Medicine

A	NV Centers in Silicon Carbide (SiC): Identification, Modeling and Basic Properties. <u>Uwe Gerstmann</u> , University of Paderborn
B	EPR Analysis of the Effects of Curcuminoids from Turmeric Spice on Superoxide Free Radicals Formed from a Xanthine-Xanthine Oxidase Reaction. <u>Pranav Gopalakrishnan</u> , Steppingstone MAGnetic Resonance Training Center
A	Room Temperature Peldor Measurements with Rigid Nitroxide Spin Labels on Duplex DNA. <u>Markus Gränz</u> , Goethe University Frankfurt
B	Radical Intermediates in the Formation and Repair of Spore Photoproduct. <u>Ellen C. Hayes</u> , University of Washington
A	Electronic Structure of a Cu^{II}-Alkoxide Complex Modeling Intermediates in Copper-Catalyzed Alcohol Oxidations. <u>Ellen C. Hayes</u> , University of Washington
B	Feasibility Study of a CW-EPR-based Oxygen-mapping Technique Using a Pair of Isotopic Nitroxyl Radicals. <u>Hiroshi Hirata</u> , Hokkaido University
A	Spin Labelled Carbohydrates on Au Nanoparticles. <u>Michael Hollas</u> , University of Manchester
B	Enhancing Nuclear Polarization for Nanoscale Imaging Using Magnetic Resonance Force Microscopy. <u>Corinne E. Isaac</u> , Cornell University
A	Electrically Detected Magnetic Resonance Spectroscopy of Polymer Layers at B_1 Exceeding B_0 with Copper Microwire on Silicon Nitride/silicon Substrate. <u>Shirin Jamali</u> , University of Utah
B	Characteristics of ¹⁴N- and ¹⁵N-labeled Dicarboxy-PROXYLs as Oxygen-sensitive Probes for CW-EPR-based Single-point Imaging (SPI). <u>Harue Kubota</u> , Hokkaido University
A	Electron Spectral Diffusion Measured via ELDOR for DNP at 7 T. <u>Alisa Leavesley</u> , University of California Santa Barbara
B	Determination of Zero Field Splitting Distribution and Rotational Correlation Times for Slow-motion Gd(III)-DOTA X-band cw-EPR Spectra Using a General Spin System Stochastic Liouville Equation Solver. <u>Jeremy D. Lehner</u> , University of Washington
A	Newly Improved ADANI SPINSCAN EPR/ESR Benchtop Spectrometer. <u>Ken Liu</u> , Symphotic
B	Three Homologous TonB-dependent Transporters Utilize Different Mechanisms to Regulate Protein-Protein Interactions. <u>Lishan Liu</u> , University of Virginia
B	Speciation of Vanadyl Porphyrin Complexes Through High Resolution Electron Paramagnetic Resonance. <u>Donald Mannikko</u> , University of Washington
A	Frequency Swept Rapid Scan EDMR. <u>Duane McCrory</u> , National Institute of Standards and Technology
B	High-field/high-frequency Pulsed/CW EPR with Increased Concentration Sensitivity and High Power. <u>Johannes E. McKay</u> , National High Magnetic Field Laboratory

A	An AWG-based Digital X-band Saturation Recovery Spectrometer for Spin Lattice Relaxation Measurements. <u>Joseph McPeak</u> , University of Denver
B	Spin-dependent Charge Carrier Interaction Processes in Polyfluorene Thin Films. <u>Richards (Chad) Miller III</u> , University of Utah
A	Calculation of 2D-SECSY (Spin-Echo Correlation Spectroscopy) and 2D-ELDOR (Electron Double Resonance) Signal Using Stochastic- Liouville Equation (SLE). <u>Sushil K. Misra</u> , Concordia University
B	Mechanistic Investigations on Electron Bifurcation by EPR Spectroscopy. <u>David Mulder</u> , National Renewable Energy Laboratory
A	Frequency-Domain EPR up to Several THz: Direct Observation of Large ZFS in Co^{II} Clusters. <u>Joscha Nehr Korn</u> , University of Washington
B	Characterization of Solvent Dynamical Properties Around the B12-dependent Ethanolamine Ammonia-lyase by Using Spin Probe-EPR Spectroscopy. <u>Benjamin Nforneh</u> , Emory University
A	Out-of-phase ESEEM: Measuring Distances of Excited Radical-pair States to Identify the Final Electron Donor in Cryptochromes and Photolyases. <u>Daniel Nohr</u> , Universität Freiburg
B	Development of High-frequency Cantilever-detected ESR Technique and its Application to Metalloporphyrin Complexes. <u>Tsubasa Okamoto</u> , Kobe University
A	Probing the Membrane Binding of Alpha-Synuclein: One Spin Label at a Time. <u>Jessica Sarver</u> , Swarthmore College
B	Trityl Radical Relaxation and S/N at Frequencies Between 0.4-1 GHz. <u>Yilin Shi</u> , University of Denver
A	Coplanar Waveguide Microresonators for High-Frequency Optically-Detected Magnetic Resonance. <u>Muhandis Shiddig</u> , TU Dortmund
B	Stop-Flow study of Nitroxide Reduction by Human Lymphocytes. <u>Pragya R. Shrestha</u> , National Institute of Standards and Technology
A	Selective Membrane Disruption Mechanism of an Antibacterial γ-AApeptide Defined by EPR Spectroscopy. <u>Likai Song</u> , National High Magnetic Field Laboratory and Florida State University
B	Oligomerization of <i>Anabaena</i> Sensory Rhodopsin Lipid Bilayers by DEER and Solid State NMR Methods. <u>Alex I. Smirnov</u> , North Carolina State University
A	WaDeESR: Wavelet Denoising for Continuous Wave-ESR. <u>Madhur Srivastava</u> , Cornell University
B	WavPDS: A Wavelet Approach in Denoising Pulsed Dipolar Spectroscopy. <u>Madhur Srivastava</u> , Cornell University
B	Measurement of Paramagnetic Spin Concentration in a Solid-state System using Double Electron-electron Resonance. <u>Viktor Stepanov</u> , University of Southern California
A	Mapping the Conformational Landscape of Calmodulin with PELDOR Spectroscopy. <u>Andrew Stewart</u> , University of Manchester

B	A Surface Resonator Array Based X-band EPR Instrument for Making <i>In Vivo</i> Measurements in Finger Nails for Rapid Dosimetry. Steven G. Swarts, University of Florida
A	Electrically Detected Magnetic Resonance Spectroscopy of Spin-dependent Charge Transitions in the Organic Semiconductor poly(3,4-ethylenedioxythiophene):poly(styrene-sulfonate) for Different Ethylene Glycol Doping Concentrations at Low Temperature. Mandfro Y. Teferi, University of Utah
B	2+1 artifact Suppression in DEER Traces using Gaussian Pulses. Markus Teucher, Ruhr University Bochum
A	Low-Frequency Spectroscopy of Nuclear Spin Dressed States via EPR Frequency Shifts. Edward F. Thenell, University of Utah
B	Conformational Transitions of Maltose Binding Protein in the Native State and as Molten Globule at pH 3 as Monitored by DEER and DQC EPR Spectroscopy. Wolfgang Trommer, TU Kaiserslautern
A	In vivo EPR System From Scratch, Work-in-Progress. Mark Tseytlin, West Virginia University
B	Structural Origins of the Temperature-Dependent Free Energy Landscape for Radical Rearrangement in B₁₂-Dependent Ethanolamine Ammonia-Lyase. Umar Twahir, Emory University
A	Double-Ring Dielectric Resonators for Frequency-Tunable DEER Experiments. Alexei Tyryshkin, Princeton University
B	Sterilization by γ-Irradiation: Evaluating the Effects on Pharmaceutical Excipients. Claudio Vallotto, University of Warwick
A	Effects of Gadolinium-based Fullerenes on Solid State DNP at Cryogenic Temperatures – EPR and DNP Studies. Xiaoling Wang, National High Magnetic Field Lab
B	The Rate at Which Free Radicals Form in Extra Virgin Olive Oil as a Function of Time and Heat. Jagjeet T. Wani, Steppingstone Magnetic Resonance Training (SMART) Center
A	Multiple Frequency Electrically Detected Magnetic Resonance and Near Zero Field Magnetoresistance Study of Transport Mechanisms in Dense a-SiOC:H Thin Films of Varying Thickness. Ryan J. Waskiewicz, Pennsylvania State University
B	Demagnetization Shifts in Very High Frequency Pulsed Electron Paramagnetic Resonance. Blake Wilson, University of California Santa Barbara
A	Design of X-band Pulse EPR/ENDOR Spectrometer with Cryogenic Microwave Amplifier. Christoph Zollitsch, University College London