

Materials List for:

# Measurement of Ultrafast Vibrational Coherences in Polyatomic Radical Cations with Strong-Field Adiabatic Ionization

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## Materials

Name	Company	Catalog Number	Comments
<b>Mass spectrometer components</b>			
TOF lens stack and flight tube assembly	Jordan TOF Products, Inc.	C-677	
18 mm Z-gap detector assembly	Jordan TOF Products, Inc.	C-701Z	
TOF high voltage power supply	Jordan TOF Products, Inc.	D-603	
<b>Vacuum system components</b>			
Rotary vane backing pump	Edwards Vacuum LLC	RV12	
Turbomolecular pumps (2)	Edwards Vacuum LLC	EXT255H	
Turbomolecular pump controllers (2)	Edwards Vacuum LLC	EXC300	
Pressure gauge	Edwards Vacuum LLC	AIGX-S-DN40CF	
Chiller for water cooling	Neslab	CFT-25	
<b>Femtosecond laser system</b>			
Ti:Sapphire regenerative amplifier	Coherent, Inc.	Astellia	oscillator and amplifier in a single integrated system
Optical Parametric Amplifier (OPA)	Light Conversion	TOPAS Prime	
<b>Motion control</b>			
Motorized linear translation stage 1" travel	Thorlabs	Z825B	
controller for linear translation stage	Thorlabs	KDC 101	
USB controller hub and power supply	Thorlabs	KCH 601	
Manual linear translation stage 1" travel	Thorlabs	PT1	
<b>Detectors</b>			
Pyroelectric laser energy meter	Coherent, Inc.	1168337	
Thermal laser power meter	Coherent, Inc.	5356E16R	
Si-biased detector 200-1100 nm	Thorlabs	DET10A	
Compact USB CMOS Camera	Thorlabs	DCC1545M	
USB spectrometer	Ocean Optics	HR4000	
1 GHz digital oscilloscope	LeCroy	WaveRunner 610Zi	
<b>Optics</b>			
Type 1 BBO crystal	Crylight Photonics	BBO007	aperture and thickness may be customized
Achromatic half wave plate, 1100-2000 nm	Thorlabs	AHWP05M-1600	

Wollaston prism polarizer	Thorlabs	WPM10	
Hollow retro-reflector	PLX, Inc.	OW-20-1C	
Variable neutral density filter	Thorlabs	NDC-100C-2	
Longpass dichroic mirror 2" diameter	Thorlabs	DMLP950L	
<b>Software</b>			
Digital Camera image software	Thorlabs	ThorCam	
Instrument communication interface	National Instruments	NI-MAX	
Graphical development environment for measurement programs	National Instruments	LabVIEW	
Data processing software	Mathworks	MATLAB	