

## Vadim V. Lozovoy (CV)

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Born in Russia, Russian and US citizen.

### EMPLOYMENT

2006-2015 Academic Specialist, Michigan State University, East Lansing, USA  
2002-2005 Visiting Assistant Professor, Michigan State University, East Lansing, USA  
2001-2002 Senior Research Associate, Michigan State University, East Lansing, USA.  
1999-2001 Research Associate, Michigan State University, East Lansing, USA.  
1991-1998 Senior Research Associate, Institute of Chemical Physics, Moscow, Russia.  
1989-1990 Research Associate, Institute of Physical Chemistry, Moscow, USSR.  
1985-1988 Postgraduate. Novosibirsk State University, Dep. of Physics, Novosibirsk, USSR.  
1980-1985 Research Assistant. Institute of Chemical Kinetics and Combustion, Novosibirsk, USSR.

### EDUCATION

1989 Ph.D. Physics and Math. Russian Academy of Sciences, Novosibirsk, USSR.  
1982 MS, Physics. Novosibirsk State University, Novosibirsk, USSR.

### TEACHING

2015 “Ultrashort Shaped Laser Pulses” CEM988, Michigan State University, USA.  
2011 “Femtosecond Lasers and Applications” CEM988, Michigan State University, USA.  
2008 “Femtosecond Lasers and Chemistry” CEM988, Michigan State University, USA.  
1996 “Femtosecond spectroscopy”, Moscow Institute of Physics and Technology, Russia.  
1984 “Electrodynamics” Novosibirsk State University, USSR.  
1980 “Mechanics” Novosibirsk State University, USSR.

### R&D

2003-2015 Scientific consulting at Biophotonic Solutions Inc. ()

### PUBLICATIONS as on Nov 2015

>130 publications,  
> 3,700 citations (Google Scholar)  
h-index is 34 (34 publications with >34 citations, Google Scholar).  
i10-index 68 (68 publications with >10 citations, Google Scholar)

### PATENTS as on Nov 2015

16 issued US patents, >10 pending US and international patents.  
>30 invention disclosures

## **RESEARCH AREAS**

lasers;  
nano-optics;  
Fourier optics;  
nonlinear optics;  
photo chemistry;  
radiation chemistry;  
laser control of chemical reaction;  
multi-photon spectroscopy and microscopy.

## **EXPERIMENTAL SKILLS**

femtosecond shapers;  
fluorescence, absorption, polarization, four-wave-mixing, spectroscopies;  
intra-cavity amplification, intra-cavity absorption spectroscopies;  
photon counting optical spectroscopies;  
femtosecond, gas, solid and fiber lasers;  
electron spin resonance spectroscopy;  
pico and nanosecond pulse radiolysis;  
time resolved positron annihilation;  
supersonic and molecular beams;  
vacuum technique;  
chromatography;  
quartz blowing.

## **TEORETICAL SKILLS**

quantum physics and nonlinear optics;  
solution of differential equations;  
quantum information theory;  
genetic learning algorithms;  
Monte Carlo modeling.

## **SOFTWARE**

General programming using languages as Assembler, Basic, Fortran, Pascal, LabView;  
Scientific programming using Origin, MathCad, MatLab, Mathematica;  
Technical programming using AutoCad, Zemax, Canvas, CorelDraw.