

CURRICULUM VITAE

Name : **Constantine Kosmidis**
Title : Professor of Physics, University of Ioannina
Current Address : Department of Physics, University of Ioannina
Division of Atomic and Molecular Physics
GR 45110, Ioannina, Greece
Tel.: +30 26510 08537
e-mail: kkosmid@uoi.gr

Positions held

2014-present : Dean of the School of Science, University of Ioannina
1999-present : Director of the Central Laser Facility, University of Ioannina
2005-present : Vice-President of the research core facilities network of Uoi
2005-2009 : Head of the Department of Physics, University of Ioannina
2001-2004 : Member of the Research Committee of University of Ioannina

Current research interests and activities:

- Interaction of strong and/or short laser pulses with molecules and molecular clusters (multi-electron dissociative ionization, molecular alignment/orientation and molecular dynamics).
- Development of analytical laser based techniques
- Thin film development of nanostructured materials by pulsed laser deposition and optical characterization
- Photonics, optical sensors development

Research experience/experimental techniques:

- Ultraviolet and Vacuum Ultraviolet absorption spectroscopy
- Resonant Multiphoton Ionization spectroscopy in static and supersonic jets
- Raman spectroscopy
- Laser Induced Fluorescence
- Mass spectrometry
- Laser ablation
- Matrix Assisted Laser Desorption Ionization (MALDI)
- Pump/probe fs spectroscopy

Collaborations:

University College of Cork, Ireland	IESL-FORTH, Crete, Greece
National Research Foundation, Athens, Greece	TOPS Lab., University of Strathclyde, Scotland
University of Glasgow, Glasgow, Scotland	Max Planck Institute (MPQ), Munich, Germany
BESSY, Berlin, Germany	LENS, Florence, Italy
Rutherford Appleton Laboratory, England	Nottingham Trent University, England
Aristotle University of Thessaloniki, Greece	University of Cyprus, Cyprus
	ILM University of Lyon 1, Lyon/France

Publications in international refereed journals

- [E1]. "Absolute Vacuum Ultraviolet Absorption Spectra of Picolines."
C. Kosmidis, A. Bolovinos and P. Tsekeris
J. Mol. Spectr. 120, 11 (1986)
- [E2]. "Study of the 3s Rydberg States of 2-, 3- and 4-Picolines by Multiphoton Ionization Spectroscopy."
C. Kosmidis, A. Bolovinos and P. Tsekeris
J. Mol. Spectr. 126, 193 (1987)
- [E3]. "The Vacuum-Ultraviolet Absorption Spectra of Substituted p-Benzoquinones."
P. Brint, P. Tsekeris, A. Bolovinos and C. Kosmidis.
J. Chem. Soc. Faraday Trans. 2, 85, 177 (1989)
- [E4]. "Preresonance Raman Spectra of Methylpyridines"
C. Kosmidis, A. Bolovinos and P. Tsekeris
Journal of Raman Spectroscopy 21, 737 (1990)
- [E5]. "Laser Induced Fluorescence (LIF) of Hg² and Hg³ via dissociation of HgBr₂ at 157 nm"
C. Skordoulis, E. Sarantopoulou, S. M. Spyrou, C. Kosmidis and A.C.Cefalas
Zeits. F. Physik D: Atoms, Molecules and Clusters. 18, 175(1991)
- [E6]. "The Vacuum Ultraviolet Absorption Spectrum of Propanone, Butanone and the Cyclic Ketones C_nH_{2n-2}O (n=4,5,6,7)"
L. O' Toole, P. Brint, C. Kosmidis, G. Boulakis and P. Tsekeris
J. Chem. Soc. Faraday Trans. 87, 3343 (1991)
- [E7]. "M.P.I. Spectroscopy in the Region of the 3p Rydberg States of some Cycloketones"
C. Kosmidis, G. Boulakis, A. Bolovinos, P. Tsekeris and P. Brint
J. Mol. Structure 226, 133 (1992)
- [E8]. "The Vacuum-Ultraviolet Absorption Spectra of methyl substituted Cyclopentanones and Cyclohexanones"
L. O' Toole, P. Brint, C. Kosmidis, G. Boulakis and A. Bolovinos
J. Chem. Soc. Faraday Trans. 88, 1237 (1992)
- [E9]. "Dopant enhanced ablation of nitrocellulose by nitrogen laser"
C.Kosmidis and C.Skordoulis
Applied Physics A56, 64(1993)
- [E10]. "Polarization measurements of the resonant multiphoton ionization spectrum of the 3s Rydberg states of Monomethylpyridines",
C. Kosmidis, A. Bolovinos and P. Tsekeris,
J. Mol. Spectr. 160, 186 (1993)
- [E11]. "Multiphoton process in open atmosphere in the wavelength Region 224-230nm"
A. Clark, C. Kosmidis, R.M. Deas, K.W.D. Ledingham, A. Marshall, J. Sander and R.P.Singhal
Journal of Physics D 26, 2107 (1993)
- [E12]. "Resonant Ionization of oxygen and hydrogen atoms following laser induced photodissociation of nitrobenzene vapour"
A.Clark, C.Kosmidis, K.W.D.Ledingham, A.Marshall, J.Sander R.P., Singhal and M.Campbell

- Journal of Physics B 26, L665 (1993)
- [E13]. "On the dissociation pathways of nitrobenzene"
C. Kosmidis, K.W.D. Ledingham, A. Clark, A. Marshall, R. Jennings, J. Sander and R.P. Signal
Int. J. Mass Spectrom. and Ion Proc. 135, 229 (1994)
- [E14]. "Detection and Identification of Explosive Compounds Using laser Ionization Time of Flight Techniques"
A. Marshall, A. Clark, K.W.D. Ledingham, J. Sander, R.P. Singhal, C. Kosmidis and R.M. Deas,
Rapid Comm. in Mass Spectrom. 8, 521 (1994)
- [E15]. "Sensitive Atmospheric Pressure Detection of Nitroatomic Compounds and NO_x(x=1,2) Molecules in an Ionization Chamber Using Resonance Enhanced Multiphoton Ionization"
A. Marshall, A. Clark, R.M. Deas, C. Kosmidis, K.W.D. Ledingham, W. Peng and R.P. Signal,
The Analyst 119, 1719 (1994)
- [E16]. "Multiphoton-ionization and dissociation of Nitrotoluene Isomers by UV Laser Light"
C.Kosmidis, A.Marshall,A.Clark, R.M.Deas, K.W.D.Ledingham and R.P.Singhal.
Rapid Comm. in Mass Spectrom. 8, 607 (1994)
- [E17]. "Formation of atomic hydrogen in Matrix-assisted laser desorption ionization"
C.T.J. Scott, C Kosmidis, W.J. Jia, K.W.D. Ledingham and R.P. Singhal
Rapid Comm. in Mass Spectrom. 8, 829 (1994)
- [E18]. "A Tandem Reflectron Time-of-flight Mass Spectrometer for the Investigation of Laser Photofragmentation of Molecular ions"
W.J. Jia, K.W.D. Ledingham, C.T.J. Scott, C Kosmidis and R.P. Singhal
Rapid Comm. in Mass Spectrom. 9, 761 (1995)
- [E19] "A Comparison of the Femto-, Pico- and Nanosecond Multiphoton Ionization and Dissociation Processes of NO₂ at 248 and 496 nm"
K.W.D. Ledingham, C Kosmidis, S. Georgiou, S. Couris and R.P. Singhal
Chem. Phys. Lett. 247, 555 (1995)
- [E20] "A comparison of Femtosecond and Nanosecond Multiphoton Ionization and Dissociation for some Nitro-molecules"
K.W.D. Ledingham, H.K. Kilic, C. Kosmidis, R.M.Deas, A. Marshall, T. McCanny, R.P. Singhal, A.Langley and W. Shaikh
Rapid Comm. in Mass Spectrom. 9, 1522 (1995)
- [E21] "Laser Mass spectrometry of Biological Molecular Ions Produced by Matrix Assisted Laser Desorption Ionization (MALDI)"
W.J. Jia, C Kosmidis, K.W.D. Ledingham, C.T.J. Scott and R.P. Singhal
J. Appl. Surface Science 106, 108 (1996)
- [E22] "Multiphoton Ionization and Dissociation of NO₂ by fsec laser pulses"
R.P. Signal, H.S. Kilic, K.W.D. Ledingham, C. Kosmidis, T. McCanny, A.J. Langley and W. Shaikh
Chem. Phys. Lett. 253, 81 (1996)
- [E23] "Photofragmentation studies of biomolecular ions of amino acids using tandem reflectron time-of flight mass spectrometer"
W.J. Jia, K.W.D. Ledingham, C.T.J. Scott, C Kosmidis and R.P. Singhal
Rapid Comm. in Mass Spectrom.10, 1597 (1996)

- [E24] "Identification of Two Allylbenzene Conformers by One-and Two photon Resonant Multiphoton Ionization Spectroscopy in a Supersonic Jet"
J. G. Philis and C. Kosmidis
J. Mol. Spectrosc. 181, 323 (1997)
- [E25] "Multiphoton Ionization and dissociation of Nitromethane using femtosecond laser pulses at 375 and 750 nm"
H.K. Kilic, K.W.D. Ledingham, C. Kosmidis, T. McCanny, R.P. Singhal, S.L. Wang, D.J. Smith, A. Langley and W. Shaikh
J. Phys. Chem. 101, 817 (1997)
- [E26] "On the fragmentation of nitrobenzene and nitrotoluene isomers using femtosecond laser pulses at 375nm"
C. Kosmidis, K.W.D. Ledingham, H.K. Kilic, T. McCanny, R.P. Singhal, A. Langley and W. Shaikh
J. Phys. Chem. 101, 2264 (1997)
- [E27] "UV Laser Multiphoton Ionization-Dissociation of Phenylsilane and its homogeneous clusters"
C. Kosmidis and J. G. Philis
Int. J. Mass Spectrom. and Ion Proc. 173, 143 (1998)
- [E28]. "Ionization and Dissociation of Benzaldehyde using short intense laser pulses"
D.J. Smith, K.W.D. Ledingham, H.K. Kilic, T. McCanny, W. Peng, R.P. Singhal, A. Langley, P.F. Taday and C. Kosmidis
J. Phys. Chem. A 102, 2519 (1998)
- [E29]. "Behavior of Polyatomic Molecules in Intense Infrared Laser Beams"
K.W.D. Ledingham, R.P. Singhal, D.J. Smith, T. McCanny, P. Graham, H.K. Kilic, W. Peng, S.L. Wang, A. Langley, P.F. Taday and C. Kosmidis
J. Phys. Chem. A 102, 3002 (1998)
- [E30]. "Time of flight Mass Spectrometry of Aromatic Molecules Subjected to High Intensity Laser Beams"
D.J. Smith, K.W.D. Ledingham, R.P. Singhal, H.K. Kilic, T. McCanny, A.J. Langley, P.F. Taday and C. Kosmidis
Rapid Comm. in Mass Spectrom. 12, 813 (1998)
- [E31]. "Comment on 'On the ionisation and dissociation of NO₂ by short intense laser pulses'
R.P. Singhal, H.S. Kilic, K.W.D. Ledingham, T. McCanny, W.X. Peng, D.J. Smith, C. Kosmidis, A.J. Langley and P.F. Taday
Chem. Phys. Lett. 292, 643 (1998)
- [E32]. "Searching for the conformers of n-butylbenzene"
J.G. Philis and C. Kosmidis
Int. J. Quantum Chem. 72, 341 (1999)
- [E33]. "Multiply Charged Ions from Aromatic molecules following irradiation in Intense laser Fields"
K.W.D. Ledingham, D.J. Smith, R.P. Singhal, T. McCanny, P. Graham, H.S. Kilic, W.X. Peng, A.J. Langley, P.F. Taday and C. Kosmidis
J. Phys. Chem. 103, 2952 (1999)
- [E34]. "Laser induced ionisation/dissociation of cyclopentanone in the 320-370 nm region"
C. Kosmidis, J.G. Philis, P. Tzallas
Phys. Chem. Chem. Phys. 1, 2945 (1999)
- [E35]. "The onset of Coulomb explosions in polyatomic molecules"

- D.J. Smith, K.W.D. Ledingham, R.P. Singhal, T. McCanny, P.Graham, H.S.Kilic, P.Tzallas, C.Kosmidis, A.J. Langley, P.F. Taday
Rapid Comm. in Mass Spectrom. 13, 1366 (1999)
- [E36]. 'Multiply Charged Intact Ions of Polyatomic Cyclic Molecules Generated by Strong Laser Fields'
C. Kosmidis, P. Tzallas, K.W.D. Ledingham, T. McCanny, R.P. Singhal, P.F.Taday, A.J. Langley
J.Phys.Chem. A 103, 6950 (1999)
- [E37]. 'Translation characteristics in the ablation of chlorobenzene van der Waals solids at 248nm'
S.Georgiou, C. Kosmidis, A. Koubenakis, W. Jia, KW.D. Ledingham
PCCP, 1, 5339 (1999)
- [E38]. 'Resonant Laser Mass Spectrometry: Fragmentation Patterns from ¹³C Naturally Labelled Molecules'
J.G. Philis, C. Kosmidis
Int. J. Mass Spectrom. 193, 69 (1999)
- [E39]. 'An investigation of the angular distributions of fragment ions arising from the linear CS₂ and CO₂ molecule'
P. Graham, K.W.D. Ledingham, R.P. Singhal, T. McCanny, C.Kosmidis, P.Tzallas, A.J. Langley, P.F. Taday
J. Phys. B.32, 5557(1999)
- [E40]. 'Unusual fragmentation patterns from the dissociation of some small molecules'
P.Graham, X. Fang, KWD Ledingham, RP Singhal, T McCanny, D.J.Smith, P.Tzallas, C.Kosmidis, A.J.Langley, P.Taday
Laser and Particle Beams, 18, 417 (2000)
- [E41] 'The angular distributions of fragment ions from labelled and unlabelled N₂O in intense laser fields'
P.Graham, KWD Ledingham, RP Singhal, T McCanny, S.M.Haskin, X.Fang, P.Tzallas, C.Kosmidis, P.Taday, A.J.Langley
J.Phys. B 33, 3779(2000)
- [E42]. ' On the multielectron dissociative Ionization of some cyclic aromatic molecules induced by strong laser fields'
P.Tzallas, C. Kosmidis, KWD Ledingham, R.P. Singhal, T. McCanny, P.Graham, S.M.Hankin, P.F. Taday, A.J.Langley
J.Phys. Chem A, 105, 529 (2001)
- [E43]. 'Coulomb explosion in aromatic molecules and their deuterated derivatives'
P.Tzallas, C. Kosmidis, P.Graham, KWD Ledingham, T. McCanny, S.M.Hankin, R.P. Singhal, P.F. Taday, A.J.Langley
Chem. Phys. Lett., 332, 236(2000)
- [E44]. '(3sⁿ) REMPI of jet-cooled acetaldehyde using two laser beams'
J.G.Philis, C. Kosmidis
J. Mol. Struct. 563-564, 99 (2001)
- [E45]. 'Angular distributions of fragment ions arising from tetrahedral CH₃I and isomer identification using intense laser fields'
P.Graham, KWD Ledingham, RP Singhal, S.M. Hankin, T McCanny, X. Fang,, P.Taday, A.J.Langley, C.Kosmidis
Laser and Particle Beams 19, 187(2001)

- [E46]. 'Ultrafast laser analysis of Nitro-PAHs using laser desorption/femtosecond ionisation mass spectrometry'
A.D. Tasker, L.Robson, S.M.Hankin, KWD Ledingham, RP Singhal, X. Fang, T McCanny, C.Kosmidis, P.Tzallas, A.J.Langley, P.Taday, E.J.Divall
Laser and Particle Beams 19, 205(2001)
- [E47]. 'Ionization /dissociation of thiazole and thiazolidine induced by strong laser fields'
P.Tzallas, C. Kosmidis, J.G.Phillis, KWD Ledingham, T. McCanny, S.M.Hankin, R.P. Singhal, P.F. Taday, A.J.Langley
Chem. Phys. Lett. 343, 91 (2001)
- [E48]. 'On the fragment ion angular distributions arising from the tetrahedral molecule CH₃I'
P.Graham, KWD Ledingham, T McCanny, S.M. Hankin, X. Fang., C.Kosmidis, P.Tzallas, A.J.Langley, P.Taday
J. Phys. B 34, 4015(2001)
- [E49]. 'Femtosecond laser time of flight mass spectrometry of labile molecular analytes: laser-desorbed nitro-aromatic molecules'
S.M. Hankin, A.D. Tasker, L. Robson, KWD Ledingham, X. Fang, P. McKenna, R.P. Singhal, C.Kosmidis, P.Tzallas, D.A. Jaroszynski, D.R. Jones, R.C. Isaak, S. Jamison
Rapid Commun. Mass Spectrom. 16, 111(2002)
- [E50]. 'A high resolution study of the interaction of aromatic and nitro-aromatic molecules with intense laser fields'
A.D. Tasker, L.Robson, KWD Ledingham, T.McCanny, P.McKenna, C. Kosmidis, DA Jaroszynski, DR Jones, RC Isaac, S. Jamison
J.Phys.Chem. 106, 4005 (2002)
- [E51]. 'Ionisation and fragmentation of laser desorbed polycyclic aromatic hydrocarbons using femtosecond and nanosecond post ionisation'
L.Robson, A.D. Tasker, KWD Ledingham, P. McKenna, T.McCanny, C. Kosmidis, P.Tzallas, DA Jaroszynski, DR Jones, RC Isaac, S. Jamison
Int. J. Mass Spectrom. 220, 69 (2002)
- [E52]. 'Ionisation and fragmentation of polycyclic aromatic hydrocarbons by femtosecond laser pulses at wavelength resonant with cation transitions'
L.Robson, KWD Ledingham, A.D. Tasker, P. McKenna, T.McCanny, C. Kosmidis, DA Jaroszynski, DR Jones, RC Isaac, S. Jamison
Chem. Phys. Lett. 360, 382(2002)
- [E53]. 'Femtosecond ionization and dissociation of laser desorbed nitro-PAHs'
A.D. Tasker, L.Robson, KWD Ledingham, T.McCanny, P. McKenna, C. Kosmidis, DA Jaroszynski,
Int. J. Mass Spectrom. 225, 53 (2003)
- [E54]. 'Multielectron Dissociative Ionization of CH₃I under psec Strong Laser Irradiation'
P. Siozos, S. Kazianis and C. Kosmidis
Int. J. Mass Spectrom. 225, 249(2003)
- [E55]. 'The lifetime of the perpendicular minimum of cis-stilbene observed by dissociative intense –laser field ionization'
W. Fuss, C. Kosmidis, W.E. Schmid and S.A. Trushin
Chem. Phys. Lett. 385, 423 (2004)
- [E56]. 'Photochemical cis-trans isomerization of free stilbene follows a Hula-twist pathway'

- W. Fuss, C. Kosmidis, W.E. Schmid and S.A. Trushin
Angew. Chem. Int. Ed. 43, 4178 (2004)
Mechanismus der photochemischen cis-trans Isomerisierung von frein Stilben-Molekülen: Hula-Twist'
W. Fuss, C. Kosmidis, W.E. Schmid and S.A. Trushin
Angew.Chem. 116,4273 (2004)
- [E57]. 'Dynamic alignment of CH₃I by strong picosecond pulses'
S. Kaziannis, P. Siozos and C. Kosmidis
Chem. Phys. Lett.401, 115(2005)
- [E58]. 'On the interaction mechanism of some alkyl iodides with strong femtosecond lasers'
C. Kosmidis, P.Siozos, S. Kaziannis, L. Robson, KWD Ledingham, P.McKenna, DA Jaroszynski
J. Phys. Chem. A 109, 1279 (2005)
- [E59]. 'Ionization and dissociation processes in some alkyl iodides induced by strong picosecond laser beam'
P. Siozos, S. Kaziannis, C. Kosmidis and A. Lyras
Int. J. Mass Spectrom. 243, 189 (2005)
- [E60]. 'Molecular hydrogen ion elimination from alkyl iodides under strong laser beams irradiation'
C. Kosmidis, S. Kaziannis, P. Siozos, A. Lyras, L. Robson, KWD Ledingham, P.McKenna, DA Jaroszynski
Int. J. Mass Spectrom. 248, 1 (2006)
- [E61]. Polyoxomolybdenum(V/VI)-Sulfite Compounds: Synthesis, Structural, and Physical Studies
N. Kapakoglou, Betzios P, S. Kazianis, C. Kosmidis, C. Drouza, M. Manos, M. Sigalas, A. Keramidas, and T. Kabanos,
Inorganic Chem. 46, 6002-6010 (2007)
- [E62]. 'Pulsed laser deposition of amorphous carbon/silver nanocomposites', G.M. Matenoglou, G.A. Evangelakis, C. Kosmidis, S. Foulis, D. Papadimitriou, and P. Patsalas,
Appl. Surf. Sci., 253, 8155 (2007)
- [E63]. 'Hybrid pulsed laser deposition of Ti-Cu-N ternary nitride thin films', G.M. Matenoglou, G.A., Evangelakis, C. Kosmidis, and P. Patsalas,
Reviews in Advanced Materials Science, 15, 38 (2006)
- [E64]. 'Effects of static electric fields on the pulsed laser deposited tetrahedral amorphous carbon films', P. Patsalas, S. Kazianis, C. Kosmidis, D. Papadimitriou, G. Abadias, G.A. Evangelakis,
J. Appl. Phys. 101 (12) art.no.124903 (2007)
- [E65]. 'Comparative Study of Multielectron Ionization of Alkyl halides Induced by ps Laser Irradiation',
S. Kaziannis and C. Kosmidis,
J. Phys. Chem A 111, 2839 (2007)
- [E66]. 'Alignment of ethyl halide molecules (C₂H₅X, X= I, Br, Cl) induced by strong ps laser irradiation
S. Kaziannis, C. Kosmidis and A. Lyras
J. Phys. Chem A 112, 4754 (2008)

- [E67]. 'Optical properties, structural parameters, and bonding of highly textured rocksalt tantalum nitride films'
G.M. Matenoglou, L.E. Koutsokeras, Ch. E. Lekka, G. Abadias, S. Camelio, G.A. Evangelakis, C. Kosmidis and P. Patsalas
J. Appl. Phys. 104, 124907 (2008)
- [E68]. 'The ejection anisotropy in the Coulomb explosion of some alkyl halide molecules under strong ps laser fields'
S. Kaziannis and C. Kosmidis
Chem. Phys. Lett. 467, 281 (2009)
- [E69]. 'Structure, stability and bonding of ternary transition metal nitrides'
G.M. Matenoglou, L.E. Koutsokeras, Ch. E. Lekka, G. Abadias, C. Kosmidis, G.A. Evangelakis and P. Patsalas,
Surf. and Coating Technology 204, 911(2009)
- [E70]. 'Metal-containing Diamond like Carbon (DLC:Me) and AlN (AlN:Me) metallo-dielectric nanocomposites'
G.M. Matenoglou, H. Zoubos, A. Lotsari, Ch. E. Lekka, Ph. Komninou, C. Kosmidis, G.A. Evangelakis and P. Patsalas,
Thin Solid Films 518, 1508(2009)
- [E71]. 'Structure and electronic properties of conducting, ternary $Ti_xTa_{1-x}N$ films'
G.M. Matenoglou, Ch.E. Lekka, L.E. Koutsokeras, G. Karras, C. Kosmidis, G.A. Evangelakis, P. Patsalas, J. Appl. Phys. 105, No:103714 (2009)
- [E72]. 'The ejection of triatomic molecular hydrogen ions H_3^+ produced by the interaction of benzene molecules with ultra fast laser pulses.'
Kaziannis, S, Lontos, I, Karras, G, Corsi, C, Bellini, M and Kosmidis, C,
J. Chem. Phys. 131, 144308 (2009)
- [E73]. 'On the deposition mechanisms and the formation of glassy Cu-Zr thin films'
G.A. Almyras, G.M. Matenoglou, Ph. Komninou, C. Kosmidis, P. Patsalas, G.A. Evangelakis
J. Appl. Phys. 107, 84313 (2010)
- [E74]. 'Multielectron Dissociative Ionization of CH_3I clusters under moderate intensity ps laser irradiation'
Karras, G and Kosmidis, C
Int. J. Mass Spectrom. **290**, 133 (2010)
- [E75]. 'Angular distribution anisotropy of fragments ejected from methyl iodide clusters: dependence on fs laser intensity'
Karras G and Kosmidis C
Chem. Phys. Lett. 499, 31-35 (2010)
- [E76]. 'Formation of molecular halide ions from Alkyl-halide clusters irradiated by ps and fs laser pulses'
G. Karras, S. Danakas, C. Kosmidis
J. Phys. Chem. **A 115**, 4186 (2011)
- [E77]. 'Photosensitivity and optical performance of hydrogenated amorphous carbon films processed by picosecond laser beams'
N.T. Panagiotopoulos, G. Karras, E. Lidorikis, D.C. Koutsogeorgis, C. Kosmidis, P. Patsalas
Surface & Coatings Technology **206**, 734 (2011)

- [E78]. 'Optical encoding by Plasmon-based patterning: hard and inorganic materials become photosensitive'
A.Siozos, C. Koutsogeorgis, E. Lidorikis, G. Dimitrakopoulos, Th. Kehagias, H. Zoubos, Ph. Kominou, W. Cranton, C. Kosmidis, P. Patsalas
Nanoletters **12**, 259, (2012)
- [E79]. 'Multi-electron dissociative ionization of clusters under ps and fs laser irradiation: the case of alkyl-halide clusters'
G. Karras, C. Kosmidis
Phys. Chem. Chem. Phys., **14** (35), 12147 (2012)
- [E80]. 'Selective ionization/dissociation of oriented N₂O molecules by asymmetric fs laser field'
N. Kotsina, S. Kaziannis, S. Danakas and C. Kosmidis
J. Chem. Phys. **139**, 104313 (2013)
- [E81] 'Single crystal coordinating solvent exchange as general method for enhancement of the photoluminescence properties of lanthanide MOFs' '
Kyprianidou E.J., Lazarides T, Kaziannis S, Kosmidis C, Itskos G, Manos MJ, Tasiopoulos A.J
Mater. Chem. A, **2**, 5258 (2014)
- [E82] 'Hydrogen migration in methanol studied under asymmetric fs laser irradiation'
Kotsina N, Kaziannis S, Kosmidis C
Chem. Phys. Lett. **604**, 27 (2014)
- [E83] 'Interaction of toluene with two-color asymmetric laser fields: Controlling the directional emission of molecular hydrogen fragments'
Kaziannis S, Kotsina N, Kosmidis C
J. Chem. Phys. **141**, 104319 (2014)
- [E84]. 'Formation of plasmonic colloidal silver for flexible and printed electronics using laser ablation'
Kassavetis S, Kaziannis S, Pliatsikas N, Avgeropoulos A, Karantzalis AE, Kosmidis C, Lidorikis E, Patsalas P
Applied Surf. Science **336**, 262 (2015)
- [E85]. 'Phase Dependence of OD⁺, HOD⁺ and H₃⁺ ions released from the deuterated dication of methanol under $\omega/2\omega$ laser field irradiation'
N. Kotsina, S. Kaziannis, and C. Kosmidis
Int. J. Mass Spectrom. **380**, 34 (2015)
- [E86]. 'Laser-matter interactions, phase changes and diffusion phenomena during laser annealing of plasmonic AlN: Ag templates and their applications in optical encoding'
A Siozos, DC Koutsogeorgis, E Lidorikis, GP Dimitrakopoulos, N Pliatsikas, G. Vourlias, T. Kehagias, Ph. Komninou, W. Cranton, C. Kosmidis, P. Patsalas
Journal of Physics D: Applied Physics **48** (28), 285306
- [E87]. 'High acoustic strains in Si through ultrafast laser excitation of Ti thin-film transducers'
E. Tzianaki, M. Bakarezos, G.D Tsibidis, Y. Orphanos, P.A Loukakos, C. Kosmidis, P. Patsalas, M. Tatarakis, N. A Papadogiannis
Optics Express **23** (13), 17191-17204 (2015)
- [E88]. 'Probing the dynamics of highly excited toluene in the fs timescale'
C. C. Papadopoulou, S. Kaziannis, C. Kosmidis,
Phys. Chem. Chem. Phys., **17**, 3127 (2015)

- [E89]. 'Elucidating the two and three-body fragmentation channels on isotopically labelled nitrous oxide by a two color asymmetric laser field'
N. Kotsina, S. Kaziannis, C. Kosmidis
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