

LIST OF SCIENTIFIC PUBLICATIONS

dr. V. Tosa

149. K. Kovacs, B. Major, E. Balogh,C.P. Koros, S.P. Rudawaski, C.M. Heyl, P. Johnsson, C.L. Arnold, A. Hullier, V. Tosa, K. Varju,
Multi-parameter optimization of a loose focusing high flux high-harmonic beamline
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 52, 055402(2019)
148. A. Falamas, V. Tosa, C. Farcau,
Hybrid architectures made of nonlinear-active and metal nanostructures for plasmon-enhanced harmonic generation
OPTICAL MATERIALS 88, 653-666(2019)
147. P. Mercea, A. Zulch, V. Tosa, J. Svoboda, J. Munzert, M. Ruter,
Composition and characteristics of olive oil from, table olive by-products
DEUTSCHE LEBENSMITTEL-RUNDSCHAU 115, 21-27(2019)
146. A.N.M. Gherman, K. Kovacs, M.V. Cristea, V. Tosa,
Artificial Neural Network Trained to Predict High-Harmonic Flux
APPLIED SCIENCES-BASEL 8, 2106(2018)
145. D.E. Rivas, B. Major, M. Weidman, W. Helml, G. Marcus, R. Kienberger, D. Charalambidis, P. Tzallas, E. Balogh, K. Kovacs, V. Tosa, B. Bergues, K. Varju, L. Veisz,
Propagation-enhanced generation of intense high-harmonic continua in the 100-eV spectral region
OPTICA 5, 1283-1289 (2018)
144. A.N.M. Gherman, N. Tosa, M.V. Cristea, V. Tosa, S. Porav, P.S. Agachi,
Artificial neural networks modeling of the parameterized gold nanoparticles generation through photo-induced process
MATERIALS RESEARCH EXPRESS 5, 085011(2018)
- 143 P.V. Mercea, C. Losher, M. Petrasch, V. Tosa,
Migration of stabilizers and plasticizer from recycled polyvinylchloride
JOURNAL OF VINYL & ADDITIVE TECHNOLOGY, 24, E112-E124 (2018)
142. B. Major, E. Balogh, K. Kovacs, S. Han, B. Schutte, P. Weber, M.J.J. Vrakking, V. Tosa, A. Rouzee, K. Varju,
Spectral shifts and asymmetries in mid-infrared assisted high-order harmonic generation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 35, A32-A38 (2018)
141. P.V. Mercea, A. Kalisch, M. Ulrich, H. Benz, O.G. Piringer, V. Tosa, R. Schuster, S. Aranyi, P. Sejersen,
Modelling migration of substances from polymers into drinking water. Part 1-Diffusion coefficient estimations
POLYMER TESTING 65, 176-188 (2018)
140. A.M.M. Gherman, N. Tosa,D.N. Dadarlat, V. Tosa, M.V. Cristea, P.S. Agachi,
Temperature dynamics of laser irradiated gold nanoparticles embedded in a polymer matrix
THERMOCHIMICA ACTA 656, 25-31 (2017)
139. D. Dadarlat, C. Tripon, V. Tosa
On the photothermal characterization of liquid thermoelectrics. New methodology based on coupled pyroelectric-Seebeck effects, together with frequency and thickness scanning procedures
THERMOCHIMICA ACTA 653, 133-137 (2017)
138. K. Kovács, M. Negro, C. Vozzi , S. Stagira and V. Tosa
Attosecond lighthouse above 100eV from high-harmonic generation of mid-infrared pulses
Journal of Optics 19, 104003 (8pp) (2017)
137. Valer Tosa, Katalin Kovács, Daniel Ursescu, Katalin Varjú
Characteristics of femtosecond laser pulses propagating in multiply ionized rare gases
Nuclear Instruments and Methods in Physics Research B 408 (2017) 271–275
136. M. Hogner, V. Tosa, I. Pupeza,

135. A. Falamas, N. Tosa, V. Tosa,
Measuring the frequency chirp of white-light continuum in a pump-probe system,
J Optoelectronics and Advanced Materials, **19**(5-6), 291-297, 2017
134. A.M.M. Gherman, N. Tosa , D.N. Dadarlat , V. Tosa , M.V. Cristea and P.S. Agachi,
Temperature Dynamics of Laser Irradiated Gold Nanoparticles Embedded in a Polymer Matrix, Thermochimica Acta (2017).
134. V. Tosa, K. Kovacs, B. Major, E. Balogh, K. Varju,
Propagation effects in highly ionised gas media, Quantum Electronics, **46**, 321-326 (2016)
133. B. Bodi, E. Balogh, V. Tosa, E. Goulielmakis, K. Varju, P. Dombi,
Attosecond pulse generation with an optimization loop in a light-field-synthesizer
OPTICS EXPRESS **24** (19), 21957-21962, 2016
132. H. Carstens, M. Högner, T. Saule, S. Holzberger, N. Lilienfein, A. Guggenmos, C. Jocher, T. Eidam, D. Esser, V. Tosa, V. Pervak, J. Limpert, A. Tünnermann, U. Kleineberg, F. Krausz, and I. Pupeza,
High-harmonic generation at 250 MHz with photon energies exceeding 100 eV,
Optica **3**, 366-369 (2016)
131. C. M. Heyl, H. Couder-Alteirac, M. Miranda, M. Louisy, K. Kovacs, V. Tosa, E. Balogh, K. Varjú, A. L'Huillier, A. Couairon, and C. L. Arnold,
Scale-invariant nonlinear optics in gases,
Optica **3**, 75-81 (2016)
130. B. Schütte, P. Weber, K. Kovács, E. Balogh, B. Major, V. Tosa, S. Han, M. J. J. Vrakking, K. Varjú, and A. Rouzée,
Bright attosecond soft X-ray pulse trains by transient phase-matching in two-color high-order harmonic generation,
Opt. Express **23**, 33947-33955 (2015)
129. V. Tosa, J. S. Lee, H. T. Kim, and C. H. Nam
Attosecond pulses generated by the lighthouse effect in Ar gas
PHYSICAL REVIEW A, **91**, 051801(R) (2015)
128. R.A. Ganeev, V. Tosa, K. Kovacs, M. Suzuki, S. Yoneya, K. Kuroda,
Influence of ablated and tunneled electrons on quasi-phase-matched high-order-harmonic generation in laser-produced plasma
PHYSICAL REVIEW A, **91**, 043823 (2015)
127. A. Bende, V. Tosa
Modeling laser induced molecule excitation using real-time time-dependent density functional theory: Application to 5- and 6-benzyluracil,
Phys. Chem. Chem. Phys., **17**, 5861-5871 (2015)
126. K. Kovacs, V. Tosa, B. Major, E. Balogh, and K. Varju
High efficiency single attosecond pulse generation with a long wavelength pulse assisted by a weak near infrared pulse
J. Sel. Topics Quant. Electron., **21**, 8700207 (2015)
125. A. Falamas, N. Tosa, V. Tosa,
Dynamics of laser excited colloidal gold nanoparticles functionalized with cysteine derivatives,
J. Quantitative Spectroscopy and Radiative Transfer, **162**, 207-212 (2015)
124. A. Moulet, V. Tosa, E. Gouilemakis,
Coherent kiloelectronvolt x-rays generated by subcycle optical drivers: a feasibility study
Opt. Lett. **39**, 6189 (2014)
123. M. Negro, M. Devetta, D. Facciala, A.G. Ciriolo, F. Calegari, F. Frassetto, L. Poletto, V. Tosa, C. Vozzi, and S. Stagira,
Non-collinear high-order harmonic generation by three interfering laser beams
Optics Express **22**, 29778 (2014)

122. E. Balogh, B. Bodi, V. Tosa, E. Goulielmakis, K. Varju, and P. Dombi
Genetic optimization of attosecond-pulse generation in light-field synthesizers
 PHYSICAL REVIEW A **90**, 023855 (2014)
121. A. Seiler, A. Bach, M. Driffield, P.P. Losada, P. Mercea, V. Tosa, R. Franz,
Correlation of foodstuffs with ethanol-water mixtures with regard to the solubility of migrants from food contact materials
 FOOD ADDITIVES AND CONTAMINANTS A **31**, 498-511 (2014)
120. E. Karimi, C. Altucci, V. Tosa, R. Velotta, L. Marrucci,
Influence of generalized focusing of few-cycle Gaussian pulses in attosecond pulse generation
 OPTICS EXPRESS **21**, 24991-24999 (2013)
119. F. Licciardello, G. Muratore, P. Mercea, V. Tosa, C. Nerin,
Diffusional Behaviour of Essential Oil Components in Active Packaging Polypropylene Films by Multiple Headspace Solid Phase Microextraction-Gas Chromatography
 PACKAGING TECHNOLOGY AND SCIENCE **26**, 173-185 (2013)
118. C.I. Hojbota, V. Tosa, P.V. Mercea,
Modelling migration in multilayer systems by a finite difference method: the spherical symmetry case
 Journal of Physics Conference Series **454**, 012006 (2013)
117. N. Tosa, F. Toadere, C.I. Hojbota, V. Tosa,
Laser-Induced Metallic Nanograined Thin Films Processing
 AIP Conference Proceedings **1565**, 179-184 (2013)
116. K. Kovacs, E. Balogh, V. Tosa, K. Varju,
Tunable Generation of High-Order Harmonics by IR and THz Fields
 AIP Conference Proceedings **1565**, 117-121 (2013)
115. V. Tosa, C.I. Hojbota,
High Order Harmonic Generation in Dual Gas Multi-Jets
 AIP Conference Proceedings **1565**, 53-56 (2013)
114. M. Micciarelli, C. Altucci, B. Della Ventura, R. Velotta, V. Tosa, A.B.G. Perez, M.P. Rodriguez, A.R. de Lera, A. Bende,
Low-lying excited-states of 5-benzyluracil
 Phys Chem. Chem. Phys. **15**, 7161-7173 (2013)
113. K. Kovacs, E. Balogh, J. Hebling, **V. Tosa**, and K. Varju,
Quasi-Phase-Matching High-Harmonic Radiation Using Chirped THz Pulses,
 Physical Review Letters, **108**, 193903 (2012)
112. E. Balogh, K. Kovacs, **V. Tosa**, K. Varju,
A case study for terahertz-assisted single attosecond pulse generation
 JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS **45**, 074022 (2012)
111. M. Negro, C. Vozzi, K. Kovacs, C. Altucci, R. Velotta, F. Frassetto, L. Poletto, P. Villoresi, S. De Silvestri, V. Tosa, S. Stagira,
Two-Color Mid-IR Optical Parametric Amplifier for Attosecond Pulse Generation
 AIP Conference Proceedings **1462**, 45-48 (2012)
110. K. Kovacs, E. Balogh, J. Hebling, V. Tosa, K. Varju,
Quasi-Phase-Matching High-Harmonics With THz Assistance
 AIP Conference Proceedings **1462**, 41-44 (2012)
109. **V. Tosa**, C. Altucci, K. Kovacs, M. Negro, S. Stagira, C. Vozzi, R. Velotta,
Single Attosecond Pulse Generation By Two Laser Fields
 AIP Conference Proceedings, **1425**, 102-105 (2012)
108. **V. Tosa**, C. Altucci, K. Kovacs, M. Negro, S. Stagira, C. Vozzi, R. Velotta,

107. M. Negro, C. Vozzi, K. Kovacs, C. Altucci, R. Velotta, F. Frassetto, L. Poletto, P. Villoresi, S. De Silvestri, **V. Tosa**, S. Stagira,
Gating of high-order harmonics generated by incommensurate two-color mid-IR laser pulses
LASER PHYSICS LETTERS **8**, 875-879 (2011)
106. E. Balogh, K. Kovacs, P. Dombi, J.A. Fulop, G. Farkas, J. Hebling, **V. Tosa**, K. Varju
Single attosecond pulse from terahertz-assisted high-order harmonic generation
PHYSICAL REVIEW A **84** 023806 (2011)
105. C. Vozzi, M. Negro, F. Calegari F, S. Stagira, K. Kovacs, **V. Tosa**
Phase-matching effects in the generation of high-energy photons by mid-infrared few-cycle laser pulses
NEW JOURNAL OF PHYSICS **13** 073003 (2011)
104. C. Jin, H.J. Woerner, **V. Tosa**, A.T. Le, J.B. Bertrand, R.R. Luchese, P.B. Corkum, D.M. Villeneuve, C.D. Lin
Separation of target structure and medium propagation effects in high-harmonic generation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS **44** 095601 (2011)
103. C. Altucci, R. Velotta, **V. Tosa**, F. Frassetto, L. Poletto, P. Villoresi, C. Vozzi, M. Negro, F. Calegari, S. De Silvestri, S. Stagira,
Time Gating of High Order Harmonics for the Generation of Continuous XUV Spectra with Multi-Cycle Driving Pulses
IEEE CLEO/QELS CONFERENCE PROCEEDING (2010)
102. D. Dadarlat, M.N. Pop, **V. Tosa**, S. Longuemart, A.H. Sahraoui, P. Hus
On the photopyroelectric investigation of thermal effusivity of solids. Amplitude vs. phase in the FPPE-TWRC configuration
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS **4** 1775 (2010)
101. **V. Tosa**, C. Altucci, R. Velotta
Polarization, ionization and spatial gates in single attosecond pulse generation
ULTRAFAST PHENOMENA XVI **92**, 920-922 (2009)
100. P. Mercea, V. Tosa, K. Kovacs, O. Piringer,
Modeling Migration of Chemical Impurities in Drinking Water Supply Systems
NUMERICAL ANALYSIS AND APPLIED MATHEMATICS, **1281**, 87-90 (2010)
99. D. Dadarlat, M. Streza M, M.N. Pop, **V. Tosa**, S. Delenclos, S. Longuemart, A.H. Sahraoui,
Photopyroelectric calorimetry of solids
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY **101**, 397-402 (2010)
98. K. Kovacs, **V. Tosa**,
Time-dependent Phase-matching in Attosecond Pulse Generation
AIP Conference Proceedings, **1228**, 408-412 (2010)
97. K. Kovacs, **V. Tosa**,
Quantum trajectories of electrons in arbitrary laser fields
JOURNAL OF MODERN OPTICS **57**, 977-983 (2010)
96. Altucci C, Velotta R, **Tosa V**, Villoresi P, Frassetto F, Poletto L, Vozzi C, Calegari F, Negro M, De Silvestri S, Stagira S,
Interplay between group-delay-dispersion-induced polarization gating and ionization to generate isolated attosecond pulses from multicycle lasers
OPTICS LETTERS **35**, 2798-2800 (2010)
95. K.T. Kim , D.H. Ko, J. Park, **V. Tosa**, C.H. Nam,
Complete temporal reconstruction of attosecond high-harmonic pulse trains
NEW JOURNAL OF PHYSICS **12**, 083019 (2010)
94. **V. Tosa**, K. Kovacs, P. Mercea, O. Piringer,
Modeling Migration of Chemical Impurities in Non-Homogeneous Multilayer Systems
Numerical Analysis and Applied Mathematics (IOP Conference Proceedings) **1168**, 657 (2009)

93. **V. Tosa**, K. T. Kim, and C. H. Nam
Macroscopic generation of attosecond-pulse trains in strongly ionized media
Phys. Rev. A **79**, 043828 (2009)
92. C. Altucci, S. Amoruso, R. Bruzzese, M. Nisoli, I. Procino, G. Sansone, **V. Tosa**, R. Velotta, C. Vozzi, J. Xia, and X. Wang
Generation and application of high energy, 30 fs pulses at 527 nm by hollow-fiber compression technique
Eur. Phys. J. Special Topics 175, 11–14 (2009)
91. D.N. Dadarlat, Mihaela Streza, M N Pop and **V. Tosa**
On the sensitivity of FPPE – TWRC method in thermal effusivity investigations of solids
J. Phys: Conf. Series, **182**, 012028 (2009)
90. K. Kovacs and **V. Tosa**
Tracing quantum trajectories of electrons in interaction with arbitrary-shape laser pulses
J. Phys: Conf. Series, **182**, 012028 (2009)
89. **V. Tosa** and K. Kovacs
Numerical model to solve impurities' migration in water pipes
J. Phys: Conf. Series, **182**, 012402 (2009)
88. N M Bîrlea, S I Bîrlea and **V. Tosa**,
The skin's electrical assymmetry,
J. Phys: Conf. Series, **182**, 012020 (2009)
87. **V. Tosa**, K. Kovacs, C. Altucci, and R. Velotta
Generating single attosecond pulse using multicycle lasers in a polarization gate,
Optics Express, **17**, 17700 (2009)
86. **V. Tosa**, E. Balogh, and K. Kovács, *Phase-matched generation of water-window x rays*,
Phys. Rev. A **80**, 045801 (2009)
85. C. Altucci, R. Esposito, **V. Tosa**, and R. Velotta
Single isolated attosecond pulse from multi-cycle lasers
Optics Letters, **33**, 2943 (2008)
84. **V. Tosa**, K. Kovacs, P. Mercea, O. Piringer,
A Finite Difference Method for Modeling Migration of Impurities in Multilayer Systems,
Numerical Analysis and Applied Mathematics (IOP Conference Proceedings) **1048**, 802 (2008)
83. **V. Tosa**, V.S. Yakovlev, F. Krausz,
Generation of tunable isolated attosecond pulses in multi-jet systems
New Journal of Physics, **10**, 025016 (2008)
82. P. Mercea, L. Petrescu, O. Piringer and **V. Tosa**, Chapter 9, *User-friendly software for migration estimations*, in *Plastic Packaging Materials for Food*, ed. O-G Piringer, A.L. Baner, Wiley-VCH, second edition (2008)
ISBN: 978-3-527-31455-3
81. **V. Tosa** and P. Mercea, 2007, Chapter 8, *Solution of diffusion equation for multilayer packaging*, in *Plastic Packaging Materials for Food*, ed. O-G Piringer, A.L. Baner, Wiley-VCH, second edition (2008),
ISBN: 978-3-527-31455-3
80. D. Dadarlat, C. Neamtu, **V. Tosa**, M. Streza,
Accurate photopyroelectric calorimetry applied to isotopic liquid mixtures
Acta Chimica Slovenica, **54** (1), pp. 149-153. (2007)
79. **V. Tosa** and C. H. Nam
Comment on "Direct observation of laser filamentation in high-order harmonic generation"

78. I. Procino, R. Velotta, C. Altucci, S. Amoruso, R. Bruzzese, X. Wang, **V. Tosa**, G. Sansone, C. Vozzi, M. Nisoli
Hollow-fiber compression of visible, 200 fs laser pulses to 40 fs pulse duration
Optics Letters **32**, 1866 (2007)
77. C. Altucci, **V. Tosa**, and R. Velotta,
„*Beyond single-atom response in isolated attosecond pulse generation*“
Phys. Rev. A 75 061401R (2007)
76. M. Kikumoto, M. Kurachi, **V. Tosa**, and H. Tashiro,
„*Flexural rigidity of individual microtubules measured by a buckling force with optical traps*“
Biophysical Journal, **90**, 1687 (2006)
75. C. H. Nam, H. T. Kim, **V. Tosa**
“*Control of High Harmonic Generation Processes Using Chirped and Self-guided Femtosecond Laser Pulses*”, chapter in book, “*Progress in Ultrafast Intense Laser Science*” editors K. Yamanouchi, S L Chin, P. Agostini, G. Ferrante, Springer Series in Chemical Physics, vol 2 (2007), ISBN: 3540381538
74. H. T. Kim, **V. Tosa**, C. H. Nam,
“*Synchronized generation of bright high-order harmonics using self-guided and chirped femtosecond laser pulses*”
J. Phys. B **39**, S265 (2006)
73. C. Altucci, **V. Tosa**, R. Velotta, E. Heesel, E. Springate and J.P. Marangos C. Vozzi, E. Benedetti, F. Calegari, G. Sansone, S. Stagira, and M. Nisoli
“*High-Order Harmonic Generation in Alkanes*”,
Phys. Rev. A **73** 043411 (2006)
72. H.T. Kim,, V. Tosa, I.J. Kim, C.H.Nam,
Temporal structure analysis of bright high-order harmonics obtained using self guided and chirped laser pulses,
Quantum Electronics and Laser Science Conference (QELS) **3**, 1836-1838 (2005)
71. **V. Tosa**, A. Bende, T.D. Silipas,, H.T. Kim, C.H. Nam,
“*Modeling plasma fluorescence induced by femtosecond laser pulse propagation in ionizing gases*”
Rom. J. Physics **50**, 741 (2005)
70. **V. Tosa**, T.D. Silipas, A. Bende,
Femtosecond pulse propagation in ionizing rare gases
Studia Physica, **50**, 330 (2005)
69. R. Brandsch, P. Mercea, O. Piringer, **V. Tosa**,
Molecular transport phenomena in multilayer plastics. Experimental investigation and modeling
Studia Physica, **50**, 157 (2005)
68. **V. Tosa**, H.T. Kim, I.J Kim, C.H. Nam,
“*High order harmonic generation with chirped and self-guided laser pulses. II. Time-frequency analysis.*”,
Phys. Rev. A **71**, 063808 (2005)
67. **V. Tosa**, H.T. Kim, I.J. Kim, C.H. Nam,
“*High order harmonic generation with chirped and self-guided laser pulses. I. Spatial and spectral analysis.*”,
Phys. Rev. A **71** 063807 (2005)
66. C. Altucci, **V. Tosa**, R. Velotta, C.H. Nam, “*Dynamical medium depletion in high-order above-threshold ionization with few-cycle laser pulses*”, Phys. Rev. A, **70**, 065402 (2004)
65. H. T. Kim, I.J. Kim, **V. Tosa**, C. M. Kim, J. J. Park, Y. S. Lee, A. Bartnik, H. Fiedorowits and C. H. Nam
“*Bright high-order harmonic generation from long gas jets toward coherent soft X-ray applications*”
Invited article, IEEE J. Sel. Topics in Quantum Electronics **10**, 1329 (2004)
64. A.E. Martirosyan, C. Altucci, C de Lisio, A. Porzio, S. Solimeno, **V. Tosa**,
“*Fringe pattern of the field diffracted by axicons*”

63. H T Kim, I J Kim, D G Lee, K-H Hong, Y S Lee, **V. Tosa**, and C H Nam,
"Optimization of high-order harmonic brightness in the space and time domains,"
Phys. Rev. A (R) **69**, 031805 (2004)
62. H T Kim, I J Kim, **V. Tosa**, Y S Lee, C H Nam,
"High brightness harmonic generation at 13 nm using self-guided and chirped femtosecond laser pulses,"
Appl. Phys. B **78**, 119 (2004)
61. T.D. Silipas, **V. Tosa**, Dana Garganciu, Gh. Batrinescu, Gabriela Roman, B. Albu,
"Gas permeation through polyamide and polyimide polymer membranes"
Studia Physica, **48**, 457 (2003)
60. A. Bende, **V. Tosa**,
"Ab initio density functional theory study of CF_2HCl and its isotopic species"
Studia Physica, **48**, 453 (2003)
59. **V. Tosa**,
"Modelling the propagation of femtosecond laser pulses in gaseous media"
Studia Physica, **48**, 551 (2003)
58. C. Altucci, R. Bruzzese, C. de Lisio, M. Nisoli, E. Priori, S. Stagira, M. Pascolini, L. Poletto, P. Villoresi, **V. Tosa**, and K. Midorikawa,
"Phase matching analysis of high order harmonics generated by truncated Bessel beams in the sub-10 fs regime"
Phys. Rev. A **68**, 033806 (2003)
57. E. Takahashi, **V. Tosa**, Y. Nabekawa, K. Midorikawa
"Experimental and theoretical analysis of a correlation between pump pulse propagation and harmonic yield in a long interaction medium"
Phys. Rev. A **68**, 023808 (2003)
56. **V. Tosa**, E. Takahashi, Y. Nabekawa, K. Midorikawa
"Generation of High Order Harmonics in a Self-Guided Beam"
Phys. Rev. A **67**, 063817 (2003)
55. C. Altucci, R. Bruzzese, C. de Lisio, A. Porzio, S. Solimeno, and **V. Tosa**
"Diffractionless Beams and their Use for Harmonic Generation"
Opt. Laser Eng. **35**, 123 (2002)
54. J. Brandsch, P. Mercea, **V. Tosa**, and O. Piringer
"Migration Modelling as a Tool for Quality Assurance of Food Packaging"
J. Food Additives and Contaminants, **19**, 29-41 (2002)
53. C. Altucci, **V. Tosa**, R. Bruzzese, C. de Lisio,
"Beam Divergence of High-Order Harmonics in the Few-Optical Cycle Regime",
J. Phys. IV **11** 351-354(2001)
52. C. Altucci, R. Bruzzese, C. de Lisio, **V. Tosa**, M. Nisoli, S. Stagira, G. Cerullo, S. de Silvestri, O Svelto, P. Barbiero, L. Poletto, G. Tondello, P. Villoresi
"High Order Harmonics in the Few Cycle Regime"
Studia Univ., special issue, 153-164 (2001)
51. **V. Tosa**,
"Collisional Effects in IRMPD of Si_2F_6 ",
Studia Univ., special issue, 394-399 (2001)
50. **V. Tosa**,
"The Effect of Fluence in Collisional Dissociation of Si_2F_6 ",
J. Photochem Photobiol., **131**, 13 (2000)

49. A. Bende, **V. Tosa**,
 "A Model for Infrared Multiple Photon Excitation of CF_2HCl ",
 Rom. Rep. in Phys. **51**, 917 (1999)
48. **V. Tosa** and K. Takeuchi,
 "Vibrational Intensities of ν_5 and ν_7 Infrared Bands of Si_2F_6 ,"
 Rom. J. Phys. **43**, 239 (1998)
47. T. D. Silipas, **V. Tosa**,
 " N_2 , O_2 , and CO_2 Permeabilities Through BrPPO Membranes"
 Rom. J. Phys. **43**, 301 (1998)
46. R. Turcu, M. Brie, G. Leising, **V. Tosa**, A. Mihut, A. Niko, A. Bot
 "FTIR reflectance studies of electrochemically prepared polypyrrole films",
 Appl. Phys. A: Mat. Science & Processing **A 66**, 1 (1998)
45. R. Turcu, M. Brie, R. Resel, G. Leising, **V. Tosa**,
 "Thermal Annealing Studies of Electrochemically prepared polypyrole films"
 Suppl. Balcan Phys. Lett. **5**, 1411(1997)
44. R. Turcu, M. Brie, G. Leising, A. Niko, **V. Tosa**, A. Mihut, A. Bot,
 "Correlation between the electrochemical synthesis conditions and the optical properties of polypyrole"
 Synt. Metals **84**, 825 (1997)
43. **V. Tosa**, K. Asimine, and K. Takeuchi,
 " Si_2F_6 Vibrational Spectroscopy Revisited",
 J. Mol. Struct. **410-411**, 411(1997)
42. H. Okamura, **V. Tosa**, T. Ishii, and K. Takeuchi,
 "Collisional Effects in the IR Multiphoton Absorption and Dissociation of Si_2F_6 ",
 J. Photochem. & Photobiol. , **95**, 203 (1996)
41. M. Kurachi, M. Kikumoto, **V. Tosa**, Y. Fujimura, H Tashiro,
 "Rigidity Measurement of a Single Microtubule by Buckling with Optical Tweezers",
 RIKEN Review **11**, 53 (1995)
40. H. Okamura, **V. Tosa**, and K. Takeuchi,
 "On the Frequency Dependence of Si_2F_6 Isotope-Selective Multiphoton Dissociation,
 Jap. J. Appl. Phys. **34**, L1497 (1995)
39. H. Okamura, **V. Tosa**, and K. Takeuchi
 "Model Analysis of Wavelength Dependence of the Isotope-Selective Decomposition of Si_2F_6 "
 Laser Science Progress Reports **17**, 72 (1995)
38. H. Okamura, Y. Ishiguro, **V. Tosa**, H. Ishii, and K. Takeuchi
 "The Effect of Buffer Gas on Infrared Multiple Photon Excitation in Si_2F_6 ",
 Laser Science Progress Reports **17**, 69 (1995)
37. **V. Tosa**, S. Isomura, and K. Takeuchi,
 "IRMPA in Si_2F_6 ",
 J. Photochem. & Photobiol. **91**, 173 (1995)
36. **V. Tosa**, R. -D. Urban, M. Takami, and K. Takeuchi,
 "The High Resolution ν_7 Band of Jet Cooled Si_2F_6 ",
 J. Mol. Spectrosc. , **172**, 254 (1995)
35. R. -D. Urban, **V. Tosa**, M. Takami, and K. Takeuchi,
 "The High Resolution ν_5 Band of Jet Cooled Si_2F_6 ",
 J. Mol. Spectrosc. , **170**, 424 (1995)

34. **V. Tosa**, K. Takeuchi,
"Infrared Multiple Photon Absorption Spectra of Si₂F₆. II. Theoretical Model",
Laser Science Progress Reports, **16**, 108(1994)
33. **V. Tosa**, S. Isomura, K. Takeuchi,
"Infrared Multiple Photon Absorption Spectra of Si₂F₆. I Experimental Results"
Laser Science Progress Reports, **16**, 105(1994)
32. **V. Tosa**, S. Isomura, Y. Kuga, and K. Takeuchi,
"Vibrational Spectroscopy and Force Field Calculations in Si₂F₆"
Vibrational Spectroscopy **8**, 45 (1994)
31. **V. Tosa**, R. Bruzzese, C. de Lisio,
"The Vibrational-Translational Relaxation of CF₂HCl in Ar ",
Laser Chemistry, **15**, 47 (1994)
30. **V. Tosa**, R. Bruzzese, C. de Lisio,
"Failure of the Linear Mixture Rule in the Vibrational Relaxation of CF₂HCl in Ar",
Chem. Phys. Lett. **202**, 555 (1993)
29. C. Altucci, R. Bruzzese, C. de Lisio, S. Solimeno, and **V. Tosa**,
"Collective Effects in Nonresonant Multiphoton Ionisation: a Theoretical and Experimental Analysis"
Inst. Phys. Conf. Series. **128**, 147 (1992)
28. C. de Lisio, C. Altucci, R. Bruzzese, T. Di Palma, S. Solimeno, N. Spinelli, and **V. Tosa**
"Space Charge Effects in the Ion Time-of-Flight Spectra Following Nonresonant Multiphoton Ionisation"
J. Phys. B (At. Mol. Opt. Phys.) **B25**, 4781 (1992)
27. I. Deac, V. Cosma, **V. Tosa**
"The Laser Wavelength Influence on the ¹³C Separation by the IRMPD of CF₂HCl Molecules"
J. Mol. Struct. **266**, 405(1992)
26. **V. Tosa**, S. Solimeno, R. Bruzzese, and C. deLisio
"Multiphoton Absorption Spectra of Freon-22 Molecules"
J. Mol. Struct. **267**, 269 (1992)
25. M. Chirtoc, **V. Tosa**, D. Bicanic
"A Versatile Inverse Photopyroelectric (IPPE) Technique and Instrument for Real Time Observation of the Condensation of Water in the Atmosphere"
Rev. Sci. Instruments **62**, 2257 (1991)
24. M. Chirtoc, **V. Tosa**, D. Bicanic
"The Inverse Photopyroelectric Technique for the Measurement of Concentration and Transport Properties in Binary Systems"
Ber. Bunsenges. Phys. Chem. **95**, 766 (1991)
23. M. Chirtoc, **V. Tosa**
"Modelling and Optimizing the Response of Pyroelectric Laser Energymeters"
Ferroelectrics **118**, 307 (1990)
22. **V. Tosa**, S. Solimeno, R. Bruzzese, and C. deLisio
"Features in the Vibrational Relaxation of Laser Excited Polyatomic Molecules"
Proc. Indian Acad. Sci. (Chem. Sci.), **103**, 469 (1991)
21. I. Deac, V. Cosma, L. Muresan, D. Silipas **V. Tosa**
"Parametric study of the selective IRMPD of CF₂HCl Molecule"
Appl. Phys. **B51**, 211 (1990)

20. **V. Tosa**, R. Bruzzese, C. deLisio, S. Solimeno
"Modeling the Vibrational Relaxation of Polyatomic Molecules. The Methylfluoride Case Study"
Laser Chemistry **10**, 147(1989)
19. R. Bruzzese, C. deLisio, S. Labuda, S. Solimeno, **V. Tosa**
"Simultaneous Measurements of Absorption and Vibrational Relaxation Time in CF₂HCl Molecules"
Nuovo Cimento, **D11**, 1693 (1989)
18. **V. Tosa**, S. Labuda, R. Bruzzese, C. deLisio, S. Solimeno
"The Vibrational Relaxation of Highly Excited Freon-22 Molecules"
J. Chem. Phys. , **91**, 4134(1989) .
17. R. Bruzzese, C. d'Ambrosio, C. deLisio, S. Solimeno, **V. Tosa**,
"Analysis of V-V,T Relaxation Times in CO₂ Laser Excited CF₂HCl Molecules"
Infrared Phys. **29**, 473 (1989) .
16. M. Bogdan, F. Balibanu, Zs. Gulacsi, M. Gulacsi, **V. Tosa** and D. Demco
"Quadrupolar Spin Relaxation Mechanisms for ²³⁵U in Liquid UF₆"
Canadian J. Phys. **67**, 52(1989) .
15. P. Mercea, **V. Tosa**, Zs. Gulacsi
"Statistical Thermodynamic Properties of SF₆, WF₆, MoF₆ and UF_{6"}
Rev. Roum. Phys. **33**, 289 (1988)
14. Zs. Gulacsi, **V. Tosa**, M. Gulacsi
"Tabulated T⁸ Eigenvalues for Cubic Symmetries"
Studia Physica **32**(2) (1987)
13. M. Gulacsi, Zs. Gulacsi, **V. Tosa**
"Anharmonic Force Field Constant for UF₆ Molecule"
Studia Physica **32**(2) (1987)
12. **V. Tosa**, M. Gulacsi, Zs. Gulacsi
"Rotational Splitting of CH₄ Analysed with Irreducible Invariant Tensor Operator Combinations"
Studia Physica **32**(2) (1987)
11. M. Gulacsi, Zs. Gulacsi, **V. Tosa**
"The Eigenvalue Spectra of Octahedral Ivariant Tensor Operator Combinations up to 8th Rank"
J. Mol. Spectrosc. **118**, 424 (1986)
10. **V. Tosa**, Gh. Tosa, I. Deac
"Computer Simulation of UF₆ Multiphoton Absorption"
J. Mol. Struct. **142**, 551 (1986)
9. M. Gulacsi, Zs. Gulacsi, **V. Tosa**
"Study of the Rotational Splitting of UF₆ Molecule"
J. Mol. Struct. **142**, 83 (1986)
8. Zs. Gulacsi, **V. Tosa**, M. Gulacsi
"A Comparative Study of CH₄ and CD₄ Rotational Splitting"
J. Mol. Struct. **142**, 87(1986)
7. P. Mercea, **V. Tosa**
"Quantum Isotope Effects in Gas Transport Through Polymers"
Isotopenpraxis **21**, 413 (1985)
6. **V. Tosa**, I. Deac, P. Mercea, Zs. Gulacsi, V. Mercea
"Computer Simulation of Multiphoton Excitation of SF₆ Molecules Cooled by Pulsed Supersonic Expansion"

Appl. Phys. , **B36**, 55 (1985)

5. **V. Tosa**, I. Deac, P. Mercea, Zs. Gulacsi

"*Multiphoton Absorption Study of SF₆ Molecule as a Function of the Initial Rotation State*"

J. Mol. Struct. , **113**, 469 (1984)

4. Zs. Gulacsi, M. Gulacsi, **V. Tosa**

"*Superconductivity and Spin Density Wave in Heavy Fermion Systems*"

J. Magnetism and Magnetic Materials **76&77**, 515 (1988)

3. Zs. Gulacsi, M. Gulacsi, **V. Tosa**

"*Coexistence of Anisotropic Superconductivity and Itinerant Antiferromagnetic Order in Heavy Fermion Systems*"

Studia Physica **33**, 11 (1988)

2. V. Crisan, I. Pop, **V. Tosa**, and M. Popescu

"*4f States in Gd₂Ni₁₇ Intermetallic Compound*"

Studia Physica, **33**, 46 (1987)

1. V. Crisan, I. Pop, **V. Tosa**, N. Rusu,

"*Band Structure of Gd₂Ni₂Al₁₅ Intermetallic Compound*"

Phys. Stat. Sol. (b), **123**, K53 (1984)