PERSONAL INFORMATION

Vera Marinova Gospodinova

Institute of Optical Materials and Technologies,
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Sex Female | Date of birth 04/05/1969 | Nationality Bulgarian

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WORK EXPERIENCE

2018/05-current

Professor, DSc.

Institute of Optical Materials and Technologies, Bulgarian Academy of Sciences, Sofia, Bulgaria
Graphene and 2D materials, Organic-inorganic hybrid devices , display holography

2017/03-2017/12

Visiting Associate Professor

Department of Electrophysics, National Chiao Tung University, Taiwan
Organic-inorganic hybrid structures and devices , graphene and 2D materials

2012/05-2017/02

Senior Researcher

Department of Photonics, National Chiao Tung University, Taiwan
Organic-inorganic hybrid structures and devices , 2D materials

2004/08-current

Assoc. Professor, DSc.

Institute of Optical Materials and Technologies, Bulgarian Academy of Sciences, Sofia, Bulgaria

2005/01-2005/07

Visiting Researcher

Mineralogisch-Pertrographisches Institute, University in Hamburg, Germany

2000/06-2004/07

Assistant Professor,
Institute of Optical Materials and Technologies, Bulgarian Academy of Sciences, Sofia, Bulgaria

1992/09-1994/12

Researcher
Bulgarian Academy of Sciences, Central Laboratory of Optical Storage and Image processing
Sofia, Bulgaria
Photorefractive crystals, holographic data storage, information processing

EDUCATION AND TRAINING

2016/02

Habilitation Thesis Completion, Doctor of Science (DSc)
Condensed Matter Physics
Bulgarian Academy of Science

Replace with EQF (or other) level if relevant

2007/05-2009/08

Senior Post - doctoral fellow
University of Antwerp, Belgium
time-resolved spectroscopy, nonlinear optics

2000/11-2004/07

Post - doctoral fellow
Department of Photonics, National Chiao Tung University, Taiwan
holographic materials, holographic data storage, image processing

1995/01-2000/05

Ph.D student
CLOSPI, Bulgarian Academy of Sciences, Sofia, Bulgaria

1992/07

Master, Optics and Spectroscopy
Physics Department, Sofia University, Sofia, Bulgaria

PERSONAL SKILLS

Mother tongue(s): Bulgarian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Russian	C2	C2	C2	C2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills: Excellent communication skills gained through more than 20 year's experience working in international teams

Job-related skills:
- Graphene and 2D materials
- Organic-inorganic hybrid structures
- Transparent conductive layers
- Nanoparticles in organic materials, liquid crystals
- Optically addressed spatial light modulator,
- Holography, Photorefractive materials, Display applications

Computer skills: MS Office (Excel, PowerPoint, Word), ORIGIN

Driving licence: B

ANNEXES

Book Chapters

1. Vera Marinova, Shiuan Huei Lin and Ken Yuh Hsu "Photorefractive Effect: Principle, Materials and Near-Infrared Holography" book chapter in Wiley Encyclopedia of Electrical and Electronics Engineering, invited, EEEE-15-0078, (2016)
2. Vera Marinova, Shiuan Huei Lin and Hsu Yuh Ken, "Two-wave mixing in organic-inorganic hybrid structures for dynamic holography" book chapter in Holographic Materials and Optical Systems, InTech Edited by I. Naydenova, D, Nazarova and Ts. Babeva ISBN 978-953-51-3038-3, Ch 21, p. 479-503 (2017)

Referred journal papers (ISI Web of Science)

1. **Vera Marinova**, Shiuan Huei Lin, Stefan Petrov, Chia Ming Chang, Yi Hsin Lin, and Ken Y. Hsu "Graphene-based electro-optic modulator operating at near infrared spectral range" Appl. Surface Sci APSUSC-D-17-10711 (2018)-minor revision
2. Yi-Chun Lai, Peter M Rafailov, **Vera Marinova**, Shiuan Huei Lin, Peichen Yu, Gou-Chung Chi, Dimitre Dimitrov, Daniela Karashanova and Marin Gospodinov "Chemical vapour deposition growth of single- and bi-layer graphene via altering gas flux geometry" Surface Science SUSC_2017_616 (2017)
3. Yu Chien Su, Chung Chin Chiou, **V. Marinova**, S. H. Lin, Hr. Dikov, P. Vitanov and K. Y. Hsu "Liquid crystal electro-optic modulator based on transparent conductive TiO2/Ag/TiO2 multilayers" Optical and Quantum Electronics (OQEL) 50, 242 (2018)
4. Yu Chien Su, Chung Chin Chiou, **Vera Marinova**, Shiuan Huei Lin, Nikola Bozhinov, Blagoy Blagoev, Tsvetanka Babeva, Ken Yuh Hsu, Dimitre Z Dimitrov, "Atomic layer deposition prepared Al-doped ZnO for liquid crystal displays applications" Optical and Quantum Electronics (OQEL) 50, 205 (2018)

5. Shrestha, Keshav; **Marinova, Vera**; Lorenz, Bernd; Chu, Paul "Evidence of 2D Fermi surface due to surface states in Bi2Te3 single crystal" Journal of Physics: Condensed Matter (2018)

6. **Vera Marinova**, Shiuan Huei Lin and Ken Yuh Hsu "Organic-inorganic hybrid structure for high-resolution spatial light modulator" Proc. SPIE v. 10557, 105570D (2018);

7. Stefan Petrov, **Vera Marinova**, Shiuan Huei Lin, Chia Ming Chang, Yi Hsin Lin, and Ken Y. Hsu "Large Scale Liquid Crystal Device with Graphene-based Electrodes" Opt. Data Process. Storage 3:114–118 (2017) Open Access

8. K. Shrestha, D. Graf, **V. Marinova**, B. Lorenz, and C. W. Chu "Weak anti-localization effect due to topological surface states in Bi2Se2:1Te0:9" Journal of Applied Physics 122, 145901 (2017); K. Shrestha **V. Marinova**, D. Graf, B. Lorenz, and C. W. Chu "Large magnetoresistance and Fermi surface study of Sb2Se2Te single crystal" Journal of Applied Physics 122, 125901 (2017);

9. K. Shrestha, **V. Marinova,** D. Graf, B. Lorenz, and C. W. Chu "Simultaneous detection of quantum oscillations from bulk and topological surface states in metallic $Bi_2Se_{2.1}Te_{0.9}$" Philosophical Magazine, 97, (20), 1740–1754 (2017)

10. K. Shrestha, **V. Marinova,** D. Graf, B. Lorenz, and C. W. Chu "Quantum oscillations in metallic Sb2Te2Se topological insulators" Phys. Rev. B 95, 075102 (2017)

11. **V Marinova**, Z F Tong, S Petrov, S H Lin, M S Chen, Y H Lin, Y C Lai, P Yu and K Y Hsu "Liquid crystal cell with graphene electrodes " J Phys Conf. Series 794, 012009 (2017)

12. D Dimitrov, P Rafailov, **V Marinova**, T Babeva, E Goovaerts, Y F Chen, C S Lee, and J Y Juang "Structural and optical properties of LuVO4 single crystals" J Phys Conf. Series 794, 012029 (2017)

13. N. Berberova, D. Daskalova, V. Strijkova, D. Kostadinova, D. Nazarova, L. Nedelchev , E. Stoykova, **V. Marinova**, C. H. Chi, S. H.Lin "Polarization holographic recording in thin films of pure azopolymer and azopolymer based hybrid materials" Opt. Mat. 64, 212-216 (2017)

14. **Vera Marinova**, Shiuan Huei Lin and Ken Yuh Hsu "Electro-optically and all optically addressed spatial light modulator devices based on organic-inorganic hybrid structures" Proc. of SPIE Vol. 10022 p.100220V-1 (2017)

15. **Vera Marinova**, Ren-Chung Liu, Shiuan Huei Lin, Ming-Syuan Chen, Yi-Hsin Lin and Ken-Yuh Hsu "Near infrared sensitive organic–inorganic photorefractive device" Optical Review **23** (5,) 811–816 (2016)

16. **V. Marinova**, C. H. Chi, Z. F. Tong, N. Berberova, R. C. Liu, S. H. Lin, Y. H. Lin, E. Stoykova and K. Y. Hsu "Liquid crystal light valve operating at near infrared spectral range" Optical and Quantum Electronics, **48**, 270 (2016)

17. Marco Caputo, Mirko Panighel, Simone Lisi, Lama Khalil, Giovanni Di Santo, Evangelos Papalazarou, Andrzej Hruban, Marcin Konczykowski, Lia Krusin-Elbaum, Ziya S. Aliev, Mahammad B. Babanly, Mikhail M. Otrokov, Antonio Politano, Evgueni V. Chulkov, Andrés Arnau, **Vera Marinova**, Pranab K. Das, Jun Fujii, Ivana Vobornik, Luca Perfetti, Aitor Mugarza, Andrea Goldoni, and Marino Marsi "Manipulating the Topological Interface by Molecular Adsorbates: Adsorption of Co-Phthalocyanine on Bi2Se3" Nano Letters, **16** (6), 3409-14 (2016)

18. N. Bozhinov, B. Blagoev, **V. Marinova,** T. Babeva, E. Goovaerts, D. Dimitrov "Properties of ALD Aluminum-doped ZnO as transparent conductive oxide" Bulgarian Chemical Communications, Volume 48, pp. 193-197 (2016)
19. **Vera Marinova**, Zhon Fang Tong, Stefan Petrov, Daniela Karashanova, Yi Hsin Lin, Shiuan Huei Lin and Ken Yuh Hsu "Graphene oxide doped PDLC films for all optically controlled light valve structures" Proc. of SPIE, **9970** doi: 10.1117/12.2238508 (2016)
20. N. Berberova, D. Nazarova, L. Nedelchev, B. Blagoeva, D. Kostadinova, **V. Marinova** and E. Stoykova "Photoinduced variation of the Stokes parameters of light passing through thin films of azopolymer-based hybrid organic/inorganic materials" Journal of Physics **700** (1) 012032 (2016)
21. Y-C Lai, P M Rafailov, E Vlaikova, **V Marinova**, S H Lin, P Yu, G C Chi, D Dimitrov, P Sveshtarov V Mehandjiev and M M Gospodinov Chemical vapour deposition growth and Raman characterization of graphene layers and carbon nanotubes" Journal of Physics **682**, 012009 (2016)
22. **Vera Marinova**, Ren Chung Liu, Shiuan Huei Lin,Yi Hsin Lin and Ken Yuh Hsu **"**Rh-doped $Bi_{12}TiO_{20}$ photorefractive crystals and their applications in near infrared sensitive light valve devices" Asian Journal of Physics Issue on Recent Progress on Photonics, Guest Editors: Francis T S Yu and Suganda Jutamulia v. **24**, n. 2, (2015)
23. **V. Marinova**, R. C. Liu, M. S. Chen, Shiuan Huei Lin, Yi Hsin Lin and Ken Yuh Hsu, "All optically controlled light valve assembled by photorefractive crystal and PDLC hybrid structure", SPIE **9508**, (2015)
24. Keshav Shrestha, **Vera Marinova**, Bernd Lorenz and Paul C. W. Chu "Shubnikov-de Haas oscillations from topological surface states of metallic Bi2Se2.1Te0.9" Phys. Rev. B **90**, 241111(R) (2014)
25. M. V. Costache, I. Neumann, J. F. Sierra, **V. Marinova**, S. Roche and S. O. Valenzuela "Fingerprints of Inelastic Transport at the Surface of the Topological Insulator Bi2Se3:Role of Electron-Phonon Coupling" Phys. Rev. Lett. **112**, 086601 (2014)
26. Ren Chung Liu, **Vera Marinova**, Shiuan Huei Lin, Ming Syuan Chen, Yi Hsin Lin and Ken Yuh Hsu "Near infrared sensitive photorefractive device using PDLC and BSO:Ru hybrid structure" Opt. Lett., **39** (11), 3320-3323 (2014)
27. T. Vitova, S. Mangold, C. Paulmann, M. Gospodinov, **V. Marinova** and B. Mihailova "X-ray absorption spectroscopy of Ru-doped relaxor ferroelectrics with a perovskite-type structure" Phys. Rev. B **89**, 144112 (2014)
28. Y-C Lai, S-C Yu, P M Rafailov, E Vlaikova, S Valkov, S Petrov, J Koprinarova, P Terziyska, **V Marinova**, S H Lin, P Yu1, G C Chi, D Dimitrov, and M M Gospodinov "Chemical vapour deposition growth of graphene layers on metal substrates" Journal of Physics, **558**, 01205 (2014)
29. **V Marinova,** E Vlaikova and E Goovaerts "Light-induced relaxation dynamics in Rh-doped Bi12TiO20 crystals" Journal of Physics, **558**, 012031 (2014)
30. N. D. Todorov, M. V. Abrashev, **V. Marinova**, R. Petrova, B. L. Shivachev, and S. C. Russev "Raman spectroscopy and lattice-dynamical calculations of Sc2O3 single crystals" Phys Rev B **87**, 1043011 (2013)
31. **V. Marinova**, Ren Chung Liu, Shiuan Huei Lin Ming-Syuan Chen, Yi Hsin Lin and Ken Yuh Hsu "Near infrared properties of Rh-doped $Bi_{12}TiO_{20}$ crystals for photonic applications" Optics Letters, **38** (4) , 495-497 (2013)
32. **V. Marinova**, V. Tomov, C. I. Chuang, Y. C. Lin, S. H. Lin, Y. F. Chao, W. C. Chou, M. Gospodinov and K. Y. Hsu "γ -ray induced effects in Sm-doped Strontium Borate Glasses"- Bulg. Chem. Commun. **45**, 222-225 (2013)

33. **Vera Marinova**, Etienne Goovaerts "Relaxation of light-induced absorption in Cr-doped $Bi_{12}TiO_{20}$ crystals" Bulg. Chem. Commun. **45**, 218-221 (2013)
34. D. Dimitrov, **V. Marinova**, V. Tomov, P. Rafailov, M. Gospodinov, "Crystals growth of topological insulators in Bi2(SexTe1-x)3 system", Bulg. Chem. Commun. , **45**, 226-228 (2013)
35. **Vera Marinova**, Ken Yuh Hsu, Shiuan Huei Lin, Ren Chung Liu and Yi Hsin Lin "Ruthenium and Rhodium doped sillenite crystals: holographic properties and applications at near-infrared spectral range" SPIE, 8776, 877605-1-6, (2013)
36. **V. Marinova**, Ren Chung Liu, Shiuan Huei Lin, and Ken Yuh Hsu "Two-wavelength holography in Ru-doped $Bi_{12}SiO_{20}$ crystals" Optics Express, **20** (18), 19628–19634 (2012)
37. N. D. Todorov, M. V. Abrashev, **V. Marinova**, R. Petrova, B. L. Shivachev, and S. C. Russev "Raman spectroscopy and lattice-dynamical calculations of Sc3CrO6 single crystals" Phys Rev B **85**, 214301 (2012)
38. **V. Marinova**, Ren Chung Liu, Shiuan Huei Lin, and Ken Yuh Hsu "Real time holography in ruthenium doped bismuth sillenite crystals at 1064 nm" Optics Letters, **36** (11), 1981-1983 (2011)
39. I. Ahmad, **V. Marinova**, H. Vrielinck, F. Callens and E. Goovaerts "Photosensitive trigonal Cr^{3+} center in $Bi_{12}SiO_{20}$ co-doped with chromium and phosphorous investigated by high frequency electron paramagnetic resonance" J Appl. Phys, **109**, 083506 (2011)
40. M. N. Iliev, V. G. Ivanov, N. Todorov, **V. Marinova**, M. V. Abrashev, A. P. Litvinchuk, and Y.-Q. Wang "Lattice dynamics of the α - and β -phases of the ferrimagnetic inverse spinel $LiFe_5O_8$" Phys Rev B **83**, 174111 (2011)
41. V. G. Ivanov, A. P. Litvinchuk, N. D. Todorov. M. V. Abrashev and **V. Marinova** "Infrared response of alpha and beta phases of $LiFe_5O_8$" Phys. Rev. B **84**(9), 094111 (2011)
42. N. D. Todorov, M. V. Abrashev, V. G. Ivanov, G. G. Tsutsumanova, **V. Marinova**, Y.-Q. Wang, and M. N. Iliev "Comparative Raman study of iso-structural YCrO3 and YMnO3: Effects of the structural distortions and the twinning" Phys. Rev. B **83**, 224303 (2011)
43. N. Waeselmann, B. Mihailova, B. J. Maier, C. Paulmann, J. M. Engel, M. Gospodinov, **V. Marinova**, U. Bismayer "Local structural phenomena in pure and Ru-doped $0.9PbZn_{1/3}Nb_{2/3}O_3$-$0.1PbTiO_3$ near the morphotropic phase boundary as revealed by Raman spectroscopy" Phys. Rev. B **83**, 214104 (2011)
44. **V. Marinova**, Shiuan Huei Lin, and Ken Yuh Hsu "Photorefractive Properties Enhancement of Doped Bismuth Sillenite Crystals" Optical Memory and Neural Networks **20**, (1), 7-22 (2011)
45. P. Petkova and **V. Marinova** "Energy level diagram of cobalt ion in $Bi_4Ge_3O_{12}$ single crystals" Balkan Phys. Letters **19**, 1-5 (2011)
46. Chun-I Chuang, **Vera Marinova**, Shiuan-Huei Lin, Yu-Faye Chao "Phase-modulated ellipsometry for probing the temperature-induced phase transition in ruthenium-doped lead zinc niobate-lead titanate single crystal" Thin Solid Films **519**, 2867-2869 (2011)
47. Cihat Boyraz, Dipanjan Mazumdar, Milko Iliev, **Vera Marinova**, Jianxing Ma, Srinivasan Gopalan, and Arunava Gupta "Structural and Magnetic Properties of Lithium Ferrite ($LiFe_5O_8$) Thin Films: Influence of Substrate on the B-site Order" Applied Physics Letters **98**, 012507-3 (2011)
48. Anna-Maria Welsch, B. Mayer, B. Mihailova, R. J. Angel, J. Zhao, C. Paulmann, J. M. Engel, M. Gospodinov, **V. Marinova**, U. Bismayer "Transformation processes in relaxor ferroelectric $PbScTaO_3$ heavily doped with Nb and Sc" Zeitschrift für Kristallographie **226** , 126-137 (2011)

49. Uzunov N, Hristov H., Arhangelova N, Penev I., **Marinova V.**, Bello M., Moschini G. "Assessment of trap parameters related to thermoluminescence peaks in BGO single crystals doped with ruthenium and vanadium" Comptes Rendus de L'Academie Bulgare des Sciences 64 (9) 1251-1258 **(**2011)
50. Shiuan Huei Lin, **V. Marinova** and Ken Yuh Hsu "Real time holography in ruthenium doped bismuth sillenite crystals at 1064 nm" Proc. of SPIE, **8120**, 81200I (2011)-invited paper
51. **V. Marinova**, Shiuan Huei Lin, and Ken Yuh Hsu "Near Infrared Holography in Ruthenium Doped Bismuth Sillenite Crystals" Materials Science and Engineering **15**, 012030 -6 (2010)
52. P. Petkova, B. Kostova, **V. Marinova** and J. Tacheva "λ - modulation absorption spectra and photochromic effect of $Bi_{12}SiO_{20}$:Fe single crystal" Materials Science and Engineering **15**, 012070-6 (2010)
53. S. H. Lin, **V. Marinova**, Y. C. Lin, D. Petrova, W. C. Chou and K. Y. Hsu "Light-induced and holographic properties of ruthenium and manganese co-doped $Bi_4Ge_3O_{12}$ crystals " J Optics A **12**, 075601, (2010).
54. **Vera Marinova,** Ijaz Ahmad, Etienne Goovaerts "Dynamics of charge carriers in Ru-doped $Bi_{12}SiO_{20}$ crystals after ns laser pulse excitation" J Appl. Phys **107**, 113106 (2010).
55. Ijaz Ahmad, **Vera Marinova,** Etienne Goovaerts **"**High-frequency electron paramagnetic resonance of the hole trapped anti-site bismuth centre in the photorefractive bismuth sillenite crystals" Phys. Rev. B **79**, 033107, (2009).
56. Scholz, T., Mihailova, B., Schneider, G. A., Malcherek, T., **Marinova, V.**, Gospodinov, M., Pagels, N., Heck, J. and Bismayer, U. "Ferroelectric properties of ruthenium doped lead zinc niobate-lead titanate single crystal" J. Appl. Phys, **106**, 074108/1-6 (2009)
57. **Vera Marinova**, Dimitrina Petrova, Shiuan Huei Lin, Mei-Li Hsieh and Ken Yuh Hsu "Influence of Rh-doping on the light-induced properties of $Bi_4Ge_3O_{12}$ single crystals" Journal of Optics A: Pure and Applied Optics **11**, 015201 (2009).
58. D. Petrova, **V. Marinova,** P. Petkova, R. C. Liu, S. H. Lin and K. Y. Hsu "Electrical and photoelectrical properties of Co, V and Co+V doped $Bi_4Ge_3O_{12}$ crystals" Journal of Optoelectronics and Advanced Materials –Symposia, **1**(3), 308-310 (2009).
59. D. Petrova, **V. Marinova,** L. Yankova, M. Veleva, D. Kaisheva, O. Petrov and M. Gospodinov "Growth and physical properties of Bi-doped Pb_2ScNbO_6 and Pb_2ScTaO_6 single crystals" Journal of Optoelectronics and Advanced Materials –Symposia **1** (3), 298-300 (2009)
60. **V. Marinova**, D. Petrova, S. H. Lin and K.Y. Hsu "Optical and holographic properties of Fe+Mn co-doped $Bi_4Ge_3O_{12}$ crystals" Opt. Comm. **281** (1), 37-43 (2008)
61. A. Amova-Kostova, M. Veleva and **V. Marinova** "Growth of ferroelectric Pb_2ScTaO_6 single crystals in oxygen and hydrogen atmospheres, and investigation of their dielectric properties" Journal of Optoelectronics and Advanced Materials, **9** (2), 268-270 (2007)
62. P. Petkova, **V. Marinova**, M. Veleva, T. Dimov and I. Iliev "Optical and magneto-optical properties of $Bi_4Ge_3O_{12}$ doped with aluminium and manganese" Journal of Optoelectronics and Advanced Materials **9** (2), 278-281 (2007)
63. D. Petrova, **V. Marinova**, R. C. Liu, S. H. Lin and K.Y. Hsu "Characterization of doped $Bi_4Ge_3O_{12}$ single crystals by light-induced absorption, electrical and photoelectrical measurements" Journal of Optoelectronics and Advanced Materials **9** (2), 282-285 (2007)
64. **V. Marinova**, B. Mihailova, T. Malcherek, C. Paulmann, K. Lengyel, L. Kovacs, M. Veleva, M. Gospodinov, B. Güttler, R. Stosch and U. Bismayer "Structural, optical and dielectric properties of relaxor-ferroelectric $Pb_{0.78}Ba_{0.22}Sc_{0.5}Ta_{0.5}O_3$" J. Phys. Cond. Matter. **18** (31), L385-393 (2006)

65. P. Petkova, **V. Marinova**, I. Iliev, T. Dimov, S. H. Lin and K. Y. Hsu "Optical, magneto-optical and holographic study of transition doped elements in $Bi_4Ge_3O_{12}$ crystals", Proc. of SPIE **6252**, 139-143 (2006)

66. **V. Marinova**, S. H. Lin, and Ken Y. Hsu "Light-induced properties of ruthenium-doped Bi_4Ge3O_{12} crystals" J. Appl. Phys. **98** (11), 113527 (2005)

67. P. Petkova, **V. Marinova**, T. Dimov, I. Iliev and M. Gospodinov "Magneto-optical effect in $Bi_4Ge_3O_{12}$ single crystals doped with vanadium" Journal of Optoelectronics and Advanced Materials **7** (1) 439-442 (2005)

68. Y. Sarov, **V. Marinova**, M. Gospodinov and S. Sainov "Optical investigation of Pb_2ScTaO_6 crystals with room temperature phase transition" Journal of Optoelectronics and Advanced Materials **7** (1) 537-540 (2005)

69. **V. Marinova**, M. Veleva, D. Petrova "The influence of annealing at different temperatures and atmospheres on the optical rotation of $Bi_{12}SiO_{20}$ crystals" Optical Materials **24** (3), 595-600 (2003)

70. **V. Marinova**, S. H. Lin, V. Sainov, M. Gospodinov, Ken Y. Hsu "Light-induced properties of Ru-doped $Bi_{12}TiO_{20}$ crystals" Journal of Optics A: Pure and Applied Optics **5** (6), S500- S506 (2003)

71. **V. Marinova**, S. H. Lin, Mei-Li Hsieh, Ken Y. Hsu, M. M. Gospodinov, V. Sainov "Optical properties of $Bi_4Ge_3O_{12}$ crystals doped with ruthenium" J. Mat. Sci. Mat. Electr. **14** (10-12), 857-858 (2003)

72. Gospodinov M.M., **Marinova V.**, Polychroniadis E., Papadopoulos D., Kampas K., Anagnostopoulos A.N., Kyritsi K., "Growth and characterization of $(SnS_2)_x$–$(SnSe_2)_{1-x}$ mixed crystals" Mat. Res. Bull. **38** (1), 177-184 (2003)

73. S. Piquette, **V. Marinova**, S. H. Lin, M. Gospodinov, K. Y. Hsu, "Light-induced absorption of Ru-doped $Bi_{12}TiO_{20}$ single crystals" Proc. of SPIE, **5260**, 238-245 (2003)

74. **V. Marinova**, S. H. Lin, M. Gospodinov, K. Y. Hsu, "Light-induced properties of doped $Bi_4Ge_3O_{12}$ single crystals", SPIE **5206**, 7-13 (2003)

75. S. Neov, **V. Marinova**, M. Reehuis, R. Sonntag "Neutron diffraction study of $Bi_{12}MO_{20}$ single crystals with sillenite structure (M=Si,$Si_{0.995}Mn_{0.005}$, $Bi_{0.53}Mn_{0.47}$)" Appl. Phys. A **74**, S1016-1018 (2002)

76. **V. Marinova**, Shiuan Huei Lin, Mei-Li Hsieh, M. M. Gospodinov, Ken Yuh Hsu "Photochromic effect and holographic recording in V, Co and Co+V doped $Bi_4Ge_3O_{12}$ single crystals" Optical Memory & Neural Network **11** (4) 211-218 (2002).

77. **V. Marinova**, I. Yanchev, M. Davity, A. N. Anagnostopoulos "Electron- and Hole Mobility of $Hg(Br_xI_{1-x})_2$ crystals (x=0.25; 0.50; 0.75)" Mat. Res. Bull. **37** (12), 1991-1996 (2002).

78. **V. Marinova**, M. Veleva "Refractive index and transmission spectra of monoclinic $Bi_3(MoO_4)_3$ single crystals" Optical Materials **19** (3), 329-333 (2002)

79. **V. Marinova**, Mei-Li Hsieh, Shiuan Huei Lin, Ken Yuh Hsu "Effect of ruthenium doping on the optical and photorefractive properties of $Bi_{12}TiO_{20}$ single crystals" Opt. Comm. **203** (3-6), 377-384 (2002)

80. **V. Marinova**, V. Sainov, Shiuan Huei Lin, Ken Yuh Hsu "Dielectric properties of doped $Bi_{12}TiO_{20}$ single crystals" Jpn. J. Appl. Phys. **41**, No.3B, 1860-1863 (2002)

81. Gospodinov M.M., **Marinova** V, Polychroniadis EK, Papadopoulos D, Spyridelis J, Kampas K, Kyritsi K., "Growth and properties of $(SnS_2)_x$-$(SnSe_2)_{1-x}$ mixed crystals", Balkan Phys. Lett. **9** (3), 152-155 (2001)

82. **V. Marinova**, V. Sainov "Electrical and transport characteristics of doped $Bi_{12}TiO_{20}$ photorefractive single crystals" Proc. of SPIE, **4430**, pp. 483-487 (2001)

83. **V. Marinova**, M. Veleva, D. Petrova, I. Kourmoulis, D. Papazoglou, A. Apostolidis, E. Vanidhis, N. Deliolanis "Optical properties of $Bi_{12}SiO_{20}$ single crystals doped with 4d and 5d transition elements" J. Appl. Phys. **89** (5), 2686-2689 (2001)
84. J. Sarov, S. Sainov, **V. Marinova** "Refractive index of ferroelectric Pb_2ScTaO_6 single crystals around the phase transition" Mat. Sci. & Eng. B 83 (1-3), 231-234 (2001)
85. **Marinova** V, Yanchev I, Daviti M, Kyritsi K, Anagnostopuolos AN. "Transport properties of $Hg(Br_xI_{1-x})_2$ crystals", Balkan Phys. Lett. **9** (4), 165-9 (2001)
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87. **V. Marinova** "Optical properties of doped $Bi_{12}TiO_{20}$ photorefractive single crystals" Vacuum **58** (2-3), 408-414, (2000)
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93. **V. Marinova**, D. Petrova, M. Gospodinov, S. Dobreva "Optical properties of $Pb(Sc_{1/2}Ta_{1/2})O_3$ single crystals" Mat. Res. Bull. **32** (6), 663-668, (1997)
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95. **V. Marinova**, V. Sainov, M. Gospodinov "Optical transmission spectra of doped $Bi_{12}TiO_{20}$ photorefractive crystals with antireflection coatings" J. Mat. Sci. Lett. **12** (21), 1680-1681 (1993).
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Published contributions to academic conferences: 83

Presented talks at international conferences: More than 150 presentations at international conferences and symposiums including 2 plenary talks, 24 invited and 45 oral presentations

Projects Leader:
National Science Fund, Bulgaria:
1."New hybrid structures based on photorefractive crystals-liquid crystals and graphene" FNI-T02/26; (2015 -2017)-completed
2."Light-induced properties of $Bi_4Ge_3O_{12}$ crystals for 3D storage and image processing" F1405, (completed)

MOST, Taiwan
Organic /Inorganic Hybrid Holographic Elements for Information Optics Applications (I) 08.2014-07.2015
MOST 103-2221-E-009-079,
Organic /Inorganic Hybrid Holographic Elements for Information Optics Applications (II) 08.2015-07.2016
MOST 104-2221-E-009-164
Organic /Inorganic Hybrid Holographic Elements for Information Optics Applications (III) 08.2016-07.2017
MOST105-2221-E-009-110

Projects Leader: International collaborations

COST Actions:
1. COST Action P8 Materials and Systems for Optical Data Storage and Processing (2008-2011) MC member

2. COST Action CA15107Multi-Functional Nano-Carbon Composite Materials Network (MultiComp) (07/04/2016 - 06/04/2020) MC substitute member

3. COST Action MP 1402 Hooking together European research in Atomic Layer Deposition HERALD (04/12/2014 - 04/12/2018) MC member

4. COST Action CA17123 "Ultrafast opto-magneto-electronics for non-dissipative information technology" MAGNETOFON13/04/2018-13/04/2022 MC member

Projects Leader: International collaborations

A. Physics Department, University of Antwerp, Belgium
Prof. Etienne Goovaerts
1. "2D materials and their hetero-structures: growth and study of their optical, electric and magnetic properties", (January 2015-December 2017) –completed
2."Optical properties modification of complex oxide materials for photonics applications" (January 2012-December 2014) -completed

B. National Chiao Tung University, Taiwan
Prof. Shiuan Huei Lin
1." Multifunctional Photonic and Versatile Magneto-electric Materials and Applications" (January 2018-December 2020)
2."Photonic and Magneto-electric Materials with Novel Functionalities" (January 2016-December 2017)
3."Emergent materials and devices for optics and optoelectronics" (January 2014– December 2015)
4."Photosensitive materials for optical data processing" (January 2012– December 2013)

Supervising:

Master students: 12 -defensed, 2 in progress,
Phd Students: 1 - defensed, 1 – in progress

Teaching ability: Introduction to Optics; Fundamentals of Photonics; Holography and 3D displays

18.07.2018