

Curriculum Vitae

Personal Details:

Name Kam Sing WONG
Address Department of Physics,
The Hong Kong University of Science and Technology
Clear Water Bay, Kowloon, Hong Kong, P. R. China
e-mail: phkswong@ust.hk , Tel:852-2358-7475

Education:

<u>Period</u>	<u>Institution</u>	<u>Degree</u>
1983-1987	Clarendon Laboratory University of Oxford	Doctor of Philosophy (D.Phil) in Solid State Physics.
1980-1983	King's College, University of London	B.Sc (Hons.) in Physics, First Class Honours

Working Experience:

2010-present	Professor, Department of Physics, Hong Kong University of Science and Technology
2000-2010	Associate Professor, Department of Physics, Hong Kong University of Science and Technology
1991-2000	Lecturer, Department of Physics, Hong Kong University of Science and Technology
1988-1991	Research Associate, Department of Physics, University of Utah.
1987-1988	Research Associate, Institute for Ultrafast Spectroscopy and Lasers, The City College of New York

Research Interests:

Femtosecond lasers and amplifiers; Optical parametric processes; Ultrafast laser spectroscopy; Photonic crystals fabrication and applications; Plasmonics; Nonlinear optical properties in semiconductors and polymers; Photo-physics of organic and inorganic materials

Professional Activities:

Journal and Research Grant Reviewer: Optics Letters, Optics Express, Applied Physics Letters, Advanced Materials, Advanced Functional Materials, Advanced Optical Materials, ACS Nano, J. Phys. D: Appl. Phys., Scientific Reports, IEEE Transactions on Electron Devices, Solid State Comm., Optics Comm., Journal of Physical Chemistry, Journal of Chemical Physics, Chemical Physics Letters, Small, Chemical Science, Organic Electronics, Research Grants Council (RGC) Hong Kong, Engineering and Physical Sciences Research Council (EPSRC) UK, Qatar National Research Fund, Singapore National Research Foundation.

Journal Editor: Journal of Infrared and Millimeter Waves (1999-2003), International Journal of Spectroscopy (2008-present)

Conference organizer: The 9th Annual Conference of the Physical Society of Hong Kong , 2004 (Conference Chair); The 4th Asian Conference on Ultrafast Phenomena (ACUP), 2006 (Conference Chair); The 5th-8th ACUP, 2008 (International Advisory Committee); The 1st Guangdong-Hong Kong Joint Workshop in Physics, 2008 (Conference Chair); 3rd International Meeting on Frontiers of Physics, 2009 (International Advisory Committee); Femtochemistry IX, 2009 (Local Organizing Committee); CLEO/Pacific Rim, 2009 (Programme Sub-Committee on the field of Ultrafast Optics and Photonics); The 7th International Conference on Nanophotonics (ICNP)/The 3rd Conference on Advances in Optoelectronics and Micro/Nano Optics (AOM) 2013 (Local Technical Program Committee); The 11th International Conference on Optical Probes of Conjugated Polymers and Organic Nanostructures 2015 (Conference co-Chair)

Invited talks (2002-Present): Ultrafast Phenomena in Semiconductors VI, SPIE International Symposia 2002, San Jose, USA, 2002; Center for High Technology Material, University of New Mexico, 2002; NanoNet-Photonics Seminar, University of Oklahoma State University, 2002; The 3rd Asian Conference on Ultrafast Phenomena, Beijing, China, 2004; State Key Lab of Optoelectronic Materials and Technologies, SunYat-Sen (Zhongshan) University, China, 2004; Institute of Polymer Optoelectronic Materials and Devices, Faculty of Materials Science & Engineering, South China University of Technology, China, 2004; Physics Department, Chinese University of Hong Kong, 2005; The 4thACUP, Hong Kong, 2006; The 8th Chinese Optoelectronics Symposium, Shanxi, China, 2006; International Conference on Optical and Optoelectronic Properties of Materials and Applications, Darwin, Australia, 2006; The 12th Annual Conference of the Physical Society of Hong Kong, Hong Kong, 2007; The 5thACUP, Singapore, 2008;The 23rd Progress in Electromagnetic Research Symposium (PIERS), Hangzhou, 2008; The IV International Conference on Photoresponsive Organics & Polymers, Hangzhou, 2008; The 6thACUP, Taipei (2010), PIERS 2010, Cambridge, USA, 2010; European Optical Society (EOS) Annual Meeting, Paris, France, 2010. PIERS 2011, Souzhou, China, 2011; The 7thACUP, Busan, S. Korea, 2012; The 7th International Conference on Nanophotonics (ICNP)/The 3rd Conference on Advances in Optoelectronics and Micro/Nano Optics (AOM) 2013

Joint Conference, Hong Kong, 2013; Collaborative Conference on 3D and Materials Research (CC3DMR) 2013, Jeju Island, Korea, 2013; The 4th Asian Spectroscopy Conference 2013, Singapore, 2013; The 8thACUP, Kobe, Japan, 2014; The 8th Meeting of Chinese Physicists Worldwide (OCPAB), Singapore 2014; Optoelectronics Global Conference 2015, Shenzhen, China 2015. The 9thACUP, Manila, Philippine, 2016.

Professional honours: Vice-president of Physical Society of Hong Kong (2005-2007); President of Physical Society of Hong Kong (2007-2009). OSA Senior Member 2013-present

Publications and Web of Science Metrics: Refereed Journal Articles: >170; Refereed Conference Articles: 87, Web of Science total citations :> 5300 (without self-citations >5100), H-index=41.

Book Chapter: 'Fabrication of Photonic Crystals using Holographic Lithography' in Organic and Hybrid Photonic Crystals, Editor: Davide Comoretto (Springer 2015)

Competitive Research Grants: RGC CERG/GRF/CRF grants in PI/Co-PI capacity with total amounting to >HK\$10 million; more than 30 grants in PI or Co-I capacity with total amounting over HK\$100 million.

Recent grants:

- (1) Title: Fabrication of photonic crystals by two-photon single-beam holographic lithography and infiltration of the polymer photonic crystal template by high refractive index semiconductors using electrodeposition method
Amount:\$552,495, period 2008-2010, GRF grant, **K. S. Wong** (PI) and A. B. Djurisic (Co-I)
- (2) Title: Fabrication of photonic crystals with defects using phase control one-step holographic lithography
Amount:\$1,160,437, period 2009-2012, GRF grant, **K. S. Wong** (PI) and J. Y. Zhou (Co-I)
- (3) Title: Institute of Molecular Functional Materials, Amount: \$92M, period: 2010-2018, AoE grant,
Wing-Wah Vivain Yam (Project coordinator and PI), Chi-Ming Chi (PI), Hak-Fun Chow (PI), Tai-Chu Lau (PI), Ben-Zhong Tang (PI), Wai-Yeung Raymond Wong (PI), Wai-Kin Chan (Co-I), Guochen Jia (Co-I), Hoi-Sing Kwok (Co-I), Hoi-Lun Kwong (Co-I), Hon-Wah Michael Lam (Co-I), Chan-Fai Ken Leung (Co-I), Kam-Wing Kenneth Lo (Co-I), Qian Miao (Co-I), David Lee Phillips (Co-I), Nai-Ching Henry Wong (Co-I), **Kam Sing Wong** (Co-I), Man-Shing Ricky Wong (Co-I), Wai-Kowk Rick Wong (Co-I), Shi-Jei Xu (Co-I).
- (4) Title: Development of efficient luminogenic materials in the aggregate state: fundamental understanding and practical applications , Amount: \$ 4.5M, period 2011-2014, Collaborative Research Fund (CRF), Ben Zhong Tang (PI), Vivian W. W. Tam (Co-I), Wai-Yeung Wong (Co-I), Hoi Sing Kwok (Co-I), Nian Lin (Co-I), **Kam Sing Wong** (Co-I), Xuhui Huang (Co-I)
- (5) Title: Control of scattering and absorption cross section using simple artificial structures
Amount: \$ 7.213M, period 2012-2015, Collaborative Research Fund (CRF), Che-ting Chan (PI), Ho-bun Chan (Co-I), Tsze-fai Ng (Co-I), Ping Sheng (Co-I), Wing-yim Tam (Co-I), Wei-jia Wen (Co-I), **Kam Sing Wong** (Co-I), Zhiyu Yang (Co-I), Tsan-hang Li (Co-I), Yue-bun Pun (Co-I), Kok-wai Cheah (Co-I), Hoi Lam Tam (Co-I)
- (6) Title: Functional plasmonics with energy localization for sensing, optoelectronics and nanoactuation
Amount: \$ 5.0M, period 2013-2016, Collaborative Research Fund (CRF), Ho-Pui Ho (PI), Che-Ting Chan (Co-I), Chik-Ho Wallace Choy (Co-I), Siu-Kia Kong (Co-I), Tsan-Hang Jensen Li (Co-I), Hock-Chun Ong (Co-I), Yue-Bun Edwin Pun (Co-I), Charles Surya (Co-I), Jianfang Wang (Co-I), **Kam Sing Wong** (Co-I), Jian-Bin Xu (Co-I)
- (7) Title: Novel wave functional materials for manipulating light and sound, Amount: \$37M, period: 2013-2021, AoE grant, C. T. Chan (Project Coordinator and PI), K. W. Cheah (PI), Aaron Ho (PI), Edwin Pun (PI), P. Sheng (PI), Penger Tong (PI), H. B. Chan (Co-I), K. H. Fung (Co-I), S. K. Kong (Co-I), Randolph Leung (Co-I), Jack Ng (Co-I), Daniel Ong (Co-I), H. L. Tam (Co-I), W. Y. Tam (Co-I), W. J. Wen (Co-I), **K. S. Wong** (Co-I), J. B. Xu (Co-I) and Jason Yang (Co-I).
- (8) Title: Phase control of optical wavefronts for imaging through a scattering medium, Amount:\$483,065, period 2014-2017, GRF grant, **K. S. Wong** (PI)
- (9) Title "Inert-Environment Facilities for investigating optical-electrical-thermal properties of hybrid structure, Amount: \$ 6.1M, period 2015-2017, Collaborative Research Fund (CRF), Wallace C.H. Choy (PI, Project co-ordinator), Wei E.I. Sha (Co-PI), Paddy K.L. Chan (Co-PI), Tony S.P. Feng, (Co-PI), **Kam Sing Wong** (Co-PI), Roy Vellaisamy (Co-PI).

Recent Highlights of our work:

1. Fabrication and ultraviolet lasing in PMMA/TPE polymer nanowires, *J. Phys. Chem. C*, **112**, 17507 (2008)

This work was highlighted in Asia Materials (Nature Publishing Group) on 14th January 2009, see:

<http://www.nature.com/am/journal/2009/200901/full/am200955a.html>

2. Phase controlled beam combining with nonlinear frequency conversion, *Optics Express* **18**, 2995 (2010)

This work was highlighted in IOP Asia-pacific on 21st May 2010, see: <http://asia.iop.org/cws/article/news/42596>

3. A superamplification effect in the detection of explosives by a fluorescent hyperbranched poly(silylenephylene) with aggregation-enhanced emission characteristics, *Polymer Chemistry* **1**, 426 (2010).

This work was highlighted as a "Hot Article" by Polymer Chemistry on its blog on 7th Oct. 2010, see:

<http://blogs.rsc.org/py/2010/10/07/>

4. Hyperbranched conjugated poly(tetraphenylethene): synthesis, aggregation-induced emission, fluorescent photopatterning, optical limiting and explosive detection, *Polymer Chemistry* **3**, 1481 (2012).

This work was highlighted in Asian Scientist on 26th April 2012, see:

<http://www.asianscientist.com/in-the-lab/fluorescent-chemosensor-polymers-detect-explosive-materials-201/>
and *Polymer Chemistry* Blog, see: <http://blogs.rsc.org/py/2012/04/>

5. Extraordinary plasmon-coupled fluorescence on gold nanorods with core/shell configuration, *J. Phys. Chem. C*, **116**, 9259 (2012).

This article was selected by editor for **Top Cover** of the April 26, 2012 issue of J. Phys. Chem. C
6. Best poster award. ‘Optical Illusion by dynamic wavefront manipulation with liquid crystal phase modulator’,
Hexiang He Kam Sing Wong, Yikun Liu and Jianying Zhou. The 3rd Symposium on Liquid Crystal Photonics,
Shanghai, China, April 19th-23th, 2014.

Others: Patents: 3 US patents. 1. US patent No. 5,540,786 “Light Emitting Material” 1996; 2. US patent No. 6,362,483
“ZnSSe-based visible-blind photovoltaic UV Detector” 2002; 3. US patent No. 6,610,985 “ZnMgS-based UV detectors” 2003

Publications (K. S. Wong)

Book

Book chapter: Fabrication of Photonic Crystals Using Holographic Lithography, by Lijun Wu, Yi Xu and Kam Sing Wong, in Organic and Hybrid Photonic Crystals, ed. Davide Comoretta and published by Springer 2015

Refereed journal publications

1 "Absorption of doped polythiophene in the middle and far infrared"

W. Hayes, F. L. Pratt, **K. S. Wong**, K. Kanato and Y. Yoshino

J. Phys. C: Solid State Physics **18**, L555 (1985)

2 "Picosecond studies of luminescence in polythiophene and polydiacetylene"

K. S. Wong, W. Hayes, T. Hattori, R. A. Taylor, J. F. Ryan, K. Kanato Y. Yoshino and D. Bloor

J. Phys. C: Solid State Physics **18**, L843 (1985)

3 "Time resolved photoluminescence study of exciton localization in Cd_{1-x}Mn_xTe"

K. S. Wong, W. Hayes, J. F. Ryan and A. K. Ramdas

J. Phys. C: Solid State Physics **19**, L829 (1986)

4 "Infrared photoinduced absorption in polydiacetylene"

F. L. Pratt, **K. S. Wong**, W. Hayes and D. Bloor

J. Phys. C: Solid State Physics **20**, L41 (1987)

5 "Correlation between conjugation length and nonradiative relaxation rate in poly(p-phenylene vinylene): a picosecond photo-luminescence study"

K. S. Wong, D. D. C. Bradley, W. Hayes, J. F. Ryan, R. H. Friend, H. Lindenberger and S. Roth

J. Physics C: Solid State Physics **20**, L187 (1987)

6 "Photoinduced infrared absorption in polydiacetylene"

F. L. Pratt, **K. S. Wong**, W. Hayes and D. Bloor

Springer Series in Solid State Science **76**, 124, ed. by H. Kuzmany, M. Mehring and S. Roth (1987)

7 "Radiative and nonradiative recombination process in photoexcited poly(p-phenylene vinylene)"

D. D. C. Bradley, R. H. Friend, **K. S. Wong**, W. Hayes, L. Lindenberger and S. Roth

Springer Series in Solid State Science **76**, 107, ed. by H. Kuzmany, M. Mehring and S. Roth (1987)

8 "Photoinduced infrared absorption in poly(p-phenylene vinylene)"

D. D. C. Bradley, R. H. Friend, F. L. Pratt, **K. S. Wong**, W. Hayes, L. Lindenberger and S. Roth

Springer Series in Solid State Science **76**, 113, ed. by H. Kuzmany, M. Mehring and S. Roth (1987)

9 "Picosecond time-resolved study of the luminescence of Cd_{1-x}Mn_xTe in magnetic field"

K. S. Wong, W. Hayes, J. F. Ryan and A. K. Ramdas

J. Phys. C: Solid State Physics **20**, L755 (1987)

10 "Infrared studies of optically excited polydiacetylene"

F. L. Pratt, **K. S. Wong**, W. Hayes and D. Bloor

J. Phys. D: Appl. Phys. **20**, 1361 (1987)

11 "Picosecond time-resolved study of luminescence of Cd_{1-x}Mn_xTe"

W. Hayes, **K. S. Wong**, J. F. Ryan and A. K. Ramdas

J. of Lum. **40&41**, 72 (1988)

12 "A picosecond photoluminescence study of exciton dynamics in Cd_{1-x}Mn_xTe"

K. S. Wong, W. Hayes, J. F. Ryan and A. K. Ramdas

J. Phys.: Condens. Matter **1**, 3115 (1989)

13 "Time dynamics of photon migration in semi-opaque media"

P. P. Ho, P. L. Baldeck, **K. S. Wong**, K. Yoo, Don Lee and R. R. Alfano

Applied Optics **28**, 2304 (1989).

14 "Femtosecond optical detection of quasi-particle dynamics in high T_c YBa₂ Cu₃ O_{7-d} superconducting thin films."

S. G. Han, Z. V. Vardeny, **K. S. Wong**, O. G. Symko and G. Koren

Phys. Rev. Lett. **65**, 2708 (1990)

15 "Femtosecond degenerate four wave mixing studies of third order electronic nonlinearities in conjugated polymers."

K. S. Wong, S. G. Han and Z. V. Vardeny

Synth. Metal, **43**, 3209 (1991)

16 "Studied of resonant and non-resonant femtosecond degenerate four wave mixing in unoriented conducting polymers."

K. S. Wong, S. G. Han and Z. V. Vardeny

J. Appl. Phys. **70** (3), 1896 (1991)

17 "Optical properties of polydiethynylsilanes: a quasi $(AB)_X$ polymers."

X. Wei, S. G. Han, **K. S. Wong**, B. C. Hess, L.X. Zheng, Z. V. Vardeny, Q. X. Ni, J. Shinar, Y. Pang, S.

Ijadimaghsoodi, T. J. Barton and S. Grigoras

Synth. Metal, **42**, 1583(1991)

18 "Femtosecond dynamics of the nonlinear optical response in polydiethynylsilane"

K. S. Wong, S. G. Han, Z. V. Vardeny, J. Shinar, Y. Pang, S. Ijadimaghsoodi, T. J. Barton , S. Grigoras and B. Parbhoo

Appl. Phys. Lett. **58**, 1695 (1991)

19 "Time resolved imaging through a highly scattering medium."

J. C. Hebden, R. A. Kruger and **K. S. Wong**

Applied Optics, **30**, 788 (1991)

20 "Measurement of χ^3 in conducting polymers at $\lambda=620\text{nm}$ "

K. S. Wong and Z. V. Vardeny

Synth. Metal. **49**, 13 (1992)

21 "Optical probe of polydiethynylsilane"

Z. V. Vardeny, X. Wei, S. G. Han, **K. S. Wong**, L. X. Zheng , G. S. Kanner, J. Shinar, Y. Pang, S. Ijadimaghsoodi , T. J. Barton , S. Grigoras and B. Parbhoo.

Synth. Metal. **50**, 453 (1992)

22 "Theoretical structure characterization of polydiethynylsilane - a new nonlinear optical material"

S. Grigoras, G. C. Lie, T. J. Barton , S. Ijadimaghsoodi , Y. Pang , J. Shinar, Z. V. Vardeny, **K. S. Wong** and S. G. Han.

Synth. Metal. **49**, 293 (1992)

23 "Time Resolved Optical Tomography"

J. C. Hedden and **K. S. Wong**

Applied Optics, **32**, 372 (1993)

24 "Molecular beam epitaxial growth and characterization of ZnSTe epilayers and ZnSTe/ZnSe superlattices on Si substrate"

Y. W. Chan, H. Wang, I. K. Sou, **K. S. Wong** and G. K. L. Wong

J. Crystal Growth, **15**, 760 (1995).

25 "Highly efficient light emission from $\text{ZnS}_x\text{Te}_{1-x}$ alloys"

I. K. Sou, **K. S. Wong**, Z. Y. Yang, H. Wang and G. K. L. Wong

Appl. Phys. Lett. **66**, 1915 (1995)

26 "Room-temperature deep-blue stimulated emission in ZnS/ZnSe and ZnSTe/ZnSe strained layer superlattices"

H. Wang, **K. S. Wong**, I. K. Sou and G. K. L. Wong

Appl. Phys. Lett. **66**, 3140 (1995)

27 "Femtosecond time-resolved Z-scan investigations of optical nonlinearities in ZnSe"

K. Y. Tseng, **K. S. Wong** and G. K. L. Wong

Opt. Lett. **21**, 180 (1996)

28 "Stimulated and spontaneous emission studies in $\text{ZnS}_{1-x}\text{Te}_x/\text{ZnSe}$ strain layer superlattices"

K. S. Wong, H. Wang, I. K. Sou, G. K. L. Wong and D. J. Mowbray

J. Crystal Growth, **159**, 689 (1996)

29 "High-speed and high-sensitivity silicon-on-insulator metal-semiconductor-metal photodetector with trench structure"

Jacob Y. L. Ho and **K. S. Wong**

Appl. Phys. Lett. **69**, 16 (1996)

30 "Bandwidth enhancement in silicon metal-semiconductor-metal photodetector by trench formation"
Jacob Y. L. Ho and **K. S. Wong**
IEEE Photon. Techn. Lett. **8**, 1064 (1996)

31 "Kilohertz femtosecond UV pumped visible BBO/LBO parametric generator and amplifier"
H. Wang, **K. S. Wong**, D. Q. Deng, Z. Y. Xu, G. K. L. Wong and J. Y. Zhang
Appl. Opt. **36**, 1889 (1997)

32 "Efficient visible femtosecond optical parametric generator and amplifier using tilted pulse-front pumping"
K. S. Wong, Z. R. Qui, H. Wang and G. K. L Wong.
Opt. Lett. **22**, 898 (1997)

33 "Blue light emission from ZnSTe-based EL devices"
I.K. Sou, J. Mao, Z. Ma, W. S. Chan, Z. Yang, **K. S. Wong** and G. K. L. Wong
J. Cryst. Growth **175-176**, 632 (1997)

34 "Second-harmonic generation from regeneratively amplified femtosecond laser pulses in BBO and LBO crystals"
J. Y. Zhang, J. Y. Huang, H. Wang, **K. S. Wong** and G. K. Wong
J. Opt. Soc. Am. B **15**, 200 (1998)

35 "One- and two-photon-excited time-resolved photoluminescence investigations of bulk and surface recombination dynamics in ZnSe"
H. Wang, **K. S. Wong**, B. A. Foreman, Z. Y. Yang and G. K. L. Wong
J. Appl. Phys. **83**, 4773 (1998)

36 "Ultrafast excited state planarization of hexamethylsexithiophene oligomer studied by femtosecond time-resolved photoluminescence"
K. S. Wong, H. Wang and G. Lanzani
Chem. Phys. Lett. **288**, 59 (1998)

37 "Origin of third order optical nonlinearity in Au:SiO₂ composite films on femtosecond and picosecond time scales"
H. B. Liao, R. F. Xiao, J. S. Fu, H. Wang, **K. S. Wong** and G. K. L. Wong
Opt. Lett. **23**, 388 (1998)

38 "Large third order optical nonlinearity in Au:TiO₂ composite films measured on a femtosecond time scale"
H. B. Liao, R. F. Xiao, H. Wang, **K. S. Wong** and G. K. L. Wong
Appl. Phys. Lett. **72**, 1817 (1998)

39 "Temperature dependence of localized and free exciton lifetime in CdZnSSe/ZnSSe single quantum wells"
H. Wang, **K. S. Wong**, G. K. L. Wong and K. K. Law
Superlattices and Microstructures **24**, 41 (1998)

40 "Time resolved photoluminescence investigations of polyacetylene derivatives"
H. Wang and **K. S. Wong**
Appl. Phys. Lett. **73**, 1637 (1998)

41 "ZnSTe-based Schottky barrier ultraviolet detectors with nanosecond response time"
Z. H. Ma, I. K. Sou, **K. S. Wong**, Z. Yang and G. K. L. Wong
Appl. Phys. Lett. **73**, 2251 (1998)

42 "Femtosecond study of luminescence dynamics of two kinds of soluble polyacetylene derivatives"
H. Wang and **K. S. Wong**
Acta Optica Sinica **19**, 360 (1999)

43 "Growth and laser properties of Nd:Ca₄YO(BO₃)₃ crystal"
H. J. Zhang, X. L. Meng, L. Zhu, C. Q. Wang, R. P. Cheng, W. T. Yu, S. J. Zhang, L. K. Sun, Y. T. Chow, W. L. Zhang,
H. Wang and **K. S. Wong**
Opt. Comm. **160**, 273 (1999)

44 "ZnSe/GaAs interface probed by time-resolved reflectance difference spectroscopy"
K. S. Wong, H. Wang, Z. Yang, I. K. Sou and G. K. L. Wong
Appl. Phys. Lett. **74**, 3663 (1999)

45 "Light emitting properties of stereoregular cis-rich poly(phenyacetylene)s"
C. W. Lee, **K. S. Wong**, W. L. Lam and B. Z. Tang
Chem. Phys. Lett. **307**, 67 (1999)

46 "Femtosecond degenerate four-wave-mixing in ZnO microcrystallite thin films"
W. Zhang, Q. Wang, L. Chai, Q. Xing, **K. S. Wong**, H. Wang, Z. K. Tang and G. K. L. Wong
Chin. Phys. Lett. **16**, 418 (1999)

47 "Femtosecond time-resolved laser-action in poly(*p*-phenylene vinylene) films: stimulated emission in an inhomogeneously broadened exciton distribution"
C. W. Lee, **K. S. Wong**, J. D. Huang, S. V. Frolov and Z. V. Vardeny
Chem. Phys. Lett. **314**, 564 (1999)

48 "Third-order optical nonlinearity in ZnO microcrystallite thin films"
W. Zhang, H. Wang, **K. S. Wong**, Z. K. Tang, G. K. L. Wong and R. Jain
Appl. Phys. Lett. **75**, 3321 (1999)

49 "Femtosecond time-resolved exciton recombination dynamics in ZnO microcrystallite thin films at room temperature"
W. Zhang, L. Chai, Q. Xing, Q. Wang, **K. S. Wong**, P. Yu, H. Wang, Z. K. Tang and G. K. L. Wong
Chin. Phys. lett. **16**, 728 (1999)

50 "Observation of in-plane optical anisotropy of spin-cast rigid rod electroluminescent polymer films"
Carrie W. Y. Law, **K. S. Wong**, Z. Yang, L. E. Horsburgh and A. P. Monkman
Appl. Phys. Lett. **76**, 1416 (2000)

51 "Triplet state dynamics in poly(2,5-pyridine diyl)"
K. S. Wong, Carrie W. Y. Law, T. Sun, A. P. Monkman, M. E. Vaschetto, L. J. Hartwell, L. E. Horsburgh, H. D. Burrows and M. da G. Miguel,
Synth. Metal. **116**, 15 (2001)

52 "Molecular-beam-epitaxy-grown ZnMgS ultraviolet photodetectors"
I. K. Sou, Marcus C. W. Wu, T. Sun, **K. S. Wong** and G. K. L. Wong
Appl. Phys. Lett. **78**, 1811 (2001)

53 "Time-resolved absorption studies of the ZnSe/ZnSTe superlattice"
H. Wang, I. K. Sou, G. K. L. Wong and **K. S. Wong**
Superlattices and Microstructures **29**, 301 (2001)

54 "Ultra-sensitive Si phototransistors with a punchthrough base"
Hailin Huo, Yuchun Chang, **K. S. Wong** and Y. Wang
Appl. Phys. Lett. **79**, 773 (2001)

55 "Two-photon absorption autocorrelation of visible to ultraviolet femtosecond laser pulses using ZnS-based photodetectors"
T. Sun, Bosco K. K. Fung, I. K. Sou, G. K. L. Wong, **K. S. Wong** and G. Lanzani
IEEE Photon. Techn. Lett. **14**, 86 (2002)

56 "Generation of the visible 13.5fs laser pulses by noncollinearly phased-matched optical parametric amplification"
T. Sun, **K. S. Wong**, W. Zhang and Q. Y. Wang
Acta Physica Sinica, **51**, 2282 (2002)

57 "Optical properties and time-resolved photoluminescence of conjugated polymers with europium complex side chain as an emitter"
K. S. Wong, T. Sun, X.-L Liu, J. Pei and W. Huang
Thin Solid Films **417**, 85 (2002)

58 "Intensity dependence and transient dynamics of donor-acceptor pair recombination in ZnO thin films grown on (001) silicon"
B. Guo, Z. R. Qiu and **K. S. Wong**
Appl. Phys. Lett. **82**, 2290 (2003)
Also selected for publication in May 2003 issue of Virtual Journal of Ultrafast Science

59 "Study of the energy transfer processes in polyfluorene doped with tetraphenyl porphyrin"
B. P. Lyons, **K. S. Wong** and A. P. Monkman
J. Chem. Phys. **118**, 4707 (2003)

60 "ZnSSe-based ultra-violet photodiodes with extremely high detectivity:
L. S. Lai, I. K. Sou, C. W. Y. Law, **K. S. Wong**, Z. Yang and G. K.L. Wong

61 "Time-resolved photoluminescence study of a ZnO thin film grown on (100) silicon substrate"

B. Guo, Z. Z. Ye and **K. S. Wong**

J. Crystal Growth, **253(1-4)**, 252 (2003)

62 "Dynamics of below-band-gap carrier in highly excited GaN"

B. Guo, **K. S. Wong**, Z. Z. Ye, H. X. Jiang and J. Y. Lin

Chinese Physics Letters **20(5)**, 749 (2003)

63 "Time-resolved study of the random lasing in ZnO powder"

T. Sun, **K. S. Wong**, W. L. Zhang, C. Lu, Q. Y. Wang and G. K. L. Wong

Acta Physica Sinica, **52(9)**, 2127 (2003)

64 "Mono-, di-, and tetrานuclear Ruthenium (II) complexes containing 3-(pyridin-2-yl)-*as*-triazino[5,6-f]1, 10-phenanthroline: synthesis, characterization, and electrochemical and photophysical properties"

H. Chao, Z. R. Qiu, L. R. Cai, H. Zhang, X. Y. Li, **K. S. Wong** and L. N. Ji

Inorg. Chem. **42**, 8823 (2003)

65 "Microcavity lasing behavior of oriented hexagonal ZnO nanowhiskers grown by hydrothermal oxidation"

Zhiren Qiu, **K. S. Wong**, Mingmei Wu, Wenjiao Lin and Huifang Xu

Appl. Phys. Lett. **84**, 2739 (2004)

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66 "Laser-induced spectral broadening and hole-burning in rare earth doped crystals and coherent optical spectroscopy for frequency upconversion"

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