Resume

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| Position | Research fellow of IBS and Principal Researcher of APRI, GIST |
| Research area | Electron acceleration and x-ray/gamma-ray generation using intense laser pulses- DEVELOPMENT OF LASER ELECTRON ACCELERATORS USING HIGH POWER LASER PULSES - DEVELOPMENTS OF X-RAYS USING LASER-PLASMA INTERACTION AND THEIR APPLICATIONS FOR ULTRAFAST NANOSCOPIC MEASUREMENTS |
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Education

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| Dates | Colleges and Universities | Department | Specialized Field | Degree Received |
| From | To |
| 1995. 3. | 1999. 2. | Korea Advanced Institute of Science and Technology (KAIST) | Physics | Physics | B. S. |
| 1999.3. | 2001. 2. | KAIST | Physics | Coherent X-ray generation using intense fs laser pulses | M. S.  |
| 2001. 3. | 2004. 8. | KAIST | Physics | Coherent X-ray generation using intense fs laser pulses | Ph. D. |

Experience

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| Dates | Institution and Address | Position | Remarks |
| From | To |
| 2004. 9. ~ 2005. 11. | Korea Advanced Institute of Science and Technology | Post-Doc. |  |
| 2005. 11 ~ 2015.09 | Advanced Photonics Research Institute (APRI), Gwangju Institute of Science and Technology (GIST) | Senior Researcher |  |
| 2015. 09 ~ Present | Advanced Photonics Research Institute (APRI), Gwangju Institute of Science and Technology (GIST) | Principal Researcher |  |
| 2013. 01 ~ Present | Center for Relativistic Laser Science, Institute for Basic Science | Research Fellow |  |

Recent papers (2015-2017)

- Hyung Taek Kim, V. B. Pathak, Ki Hong Pae, A. Lifschitz, F. Sylla, Jung Hun Shin, C. Hojbota, Seong Ku Lee, Jae Hee Sung, Hwang Woon Lee, E. Guillaume, C. Thaury, Kazuhisa Nakajima, J. Vieira, L. O. Silva , V. Malka & Chang Hee Nam, “Stable multi-GeV electron accelerator driven by waveformcontrolled PW laser pulses” Sci. Rep. (Accepted).

- Jong Ho Jeon, Kazuhisa Nakajima, Hyung Taek Kim, Yong Joo Rhee, Vishwa Bandhu Pathak , Myung Hoon Cho, Jung Hun Shin, Byung Ju Yoo, Sung Ha Jo, Kang Woo Shin, Calin Hojbota, Lee Jin Bae, Jaehyung Jung, Min Sang Cho, Jae Hee Sung, Seong Ku Lee, Byoung Ick Cho, Il Woo Choi and Chang Hee Nam, “Measurement of angularly dependent spectra of betatron gamma-rays from a laser plasma accelerator with quadrant-sectored range filters,” PHYSICS OF PLASMA 23(7) , 073105(2016).

- I. Jong Kim, Ki Hong Pae, Il Woo Choi, Chang-Lyoul Lee, Hyung Taek Kim, Himanshu Singhal, Jae Hee Sung, Seong Ku Lee, Hwang Woon Lee, Peter V. Nickles , Tae Moon Jeong, Chul Min Kim and Chang Hee Nam, “Radiation pressure acceleration of protons to 93 MeV with circularly polarized petawatt laser pulses,” PHYSICS OF PLASMA 23(7), 070701(2016).

- Jong Ho Jeon, Kazuhisa Nakajima, Hyung Taeck Kim, Yong Joo Rhee, Vishwa Bandhu Pathak, Myung Hoon Cho, Jung Hun Shin, Byung Ju Yoo, Calin Hojbota, Sung Ha Jo, Kang Woo Shin, Jae Hee Sung, Seung Ku Lee, Byeoung Ick Cho, Il Woo Choi, and Chang Hee Nam, “A broadband gamma-ray spectrometry using novel unfolding algorithms for characterization of laser wakefield-generated betatron radiation,” Review of Scientific Instruments 86, 123116 (2015).

- A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, J. Nejdl , M. Kozlova, G. Maynard, J. P. Goddet, A. Tafzi, A. Lifschitz, H. T. Kim, S. Jacquemot, V. Malka, K. Ta Phuoc, C. Thaury, P. Rousseau, G. Iaquaniello, T. Lefrou, A. Flacco, B. Vodungbo, G. Lambert, A. Rousse, P. Zeitoun and S. Sebban, “Table-top femtosecond soft X-ray laser by collisional ionization gating”, Nature Photonics 9, 817-821 (2015)

- I Jong Kim, Ki Hong Pae, Chul Min Kim, Hyung Taek Kim, Il Woo Choi, Chang-Lyoul Lee, Himanshu Singhal, Jae Hee Sung, Seong Ku Lee, Hwang Woon Lee, Peter V. Nickles, Tae Moon Jeong, Chang Hee Nam, “Fast scaling of energetic protons generated in the interaction of linearly polarized femtosecond petawatt laser pulses with ultrathin targets”, High Energy Density Physics 17, 203-207 (2015)

- A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, G. Lambert, B. Vodungbo, J-P. Goddet, A. Tafzi, J. Nejdl, M. Kozlova, G. Maynard, H. T. Kim, K. Ta Phuoc, A. Rousse, P. Zeitoun, and S. Sebban, “Demonstration of a Circularly Polarized Plasma-Based Soft-X-Ray Laser,” Phys. Rev. Lett. 115, 083901 (2015)

- Seung Beom Park, Kyungseung Kim, Kyoung Hwan Lee, Hyung Taek Kim, Chang Hee Nam, “Enhanced two‑color high‑harmonic generation achieved by adding an extra gas medium”, Appl. Phys. B 120, 723-729 (2015)

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- Hyeok Yun, Kyung-Min Lee, Jae Hee Sung, Kyung Taec Kim, Hyung Taek Kim, and Chang Hee Nam, “Resolving Multiple Molecular Orbitals Using Two-Dimensional High-Harmonic Spectroscopy”, Phys. Rev. Lett. 114, 153901 (2015) (\*Corresponding author)

- Kyoung Hwan Lee, Hyeok Yun, Jae Hee Sung, Seong Ku Lee, Hwang Woon Lee, Hyung Taek Kim, and Chang Hee Nam, “Autocorrelation-subtracted Fourier transform holography method for large specimen imaging”, Appl. Phys. Lett. 106, 061103 (2015) (\*Corresponding author)

- A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, J. Nejdl , M. Kozlova, G. Maynard, J. P. Goddet, A. Tafzi, A. Lifschitz, H. T. Kim, S. Jacquemot, V. Malka, K. Ta Phuoc, C. Thaury, P. Rousseau, G. Iaquaniello, T. Lefrou, A. Flacco, B. Vodungbo, G. Lambert, A. Rousse, P. Zeitoun and S. Sebban, “Table-top femtosecond soft X-ray laser by collisional ionization gating”, Nature Photonics 9, 817-821 (2015)

Publication List (in counter-chronological order)

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| Papers appearing in SCI |
| No | Details (List title, authors, name of conference, number of Vol. and pages, publication date, etc.) |
| 44 | - Jong Ho Jeon, Kazuhisa Nakajima, Hyung Taek Kim, Yong Joo Rhee, Vishwa Bandhu Pathak , Myung Hoon Cho, Jung Hun Shin, Byung Ju Yoo, Sung Ha Jo, Kang Woo Shin, Calin Hojbota, Lee Jin Bae, Jaehyung Jung, Min Sang Cho, Jae Hee Sung, Seong Ku Lee, Byoung Ick Cho, Il Woo Choi and Chang Hee Nam, “Measurement of angularly dependent spectra of betatron gamma-rays from a laser plasma accelerator with quadrant-sectored range filters,” PHYSICS OF PLASMA 23(7) , 073105(2016). |
| 43 | I. Jong Kim, Ki Hong Pae, Il Woo Choi, Chang-Lyoul Lee, Hyung Taek Kim, Himanshu Singhal, Jae Hee Sung, Seong Ku Lee, Hwang Woon Lee, Peter V. Nickles , Tae Moon Jeong, Chul Min Kim and Chang Hee Nam, “Radiation pressure acceleration of protons to 93 MeV with circularly polarized petawatt laser pulses,” PHYSICS OF PLASMA 23(7), 070701(2016). |
| 42 | Jong Ho Jeon,Kazuhisa Nakajima, Hyung Taeck Kim, Yong Joo Rhee, Vishwa Bandhu Pathak, Myung Hoon Cho, Jung Hun Shin, Byung Ju Yoo, Calin Hojbota, Sung Ha Jo, Kang Woo Shin, Jae Hee Sung, Seung Ku Lee, Byeoung Ick Cho, Il Woo Choi, and Chang Hee Nam, “A broadband gamma-ray spectrometry using novel unfolding algorithms for characterization of laser wakefield-generated betatron radiation,” Review of Scientific Instruments 86, 123116 (2015). |
| 41 | A. Depresseux, E. Oliva, J. Gautier, F. Tissandier, J. Nejdl , M. Kozlova, G. Maynard, J. P. Goddet, A. Tafzi, A. Lifschitz, H. T. Kim, S. Jacquemot, V. Malka, K. Ta Phuoc, C. Thaury, P. Rousseau, G. Iaquaniello, T. Lefrou, A. Flacco, B. Vodungbo, G. Lambert, A. Rousse, P. Zeitoun and S. Sebban, “Table-top femtosecond soft X-ray laser by collisional ionization gating”, Nature Photonics 9, 817-821 (2015) |
| 40 | I Jong Kim, Ki Hong Pae, Chul Min Kim, Hyung Taek Kim, Il Woo Choi, Chang-Lyoul Lee, Himanshu Singhal, Jae Hee Sung, Seong Ku Lee, Hwang Woon Lee, Peter V. Nickles, Tae Moon Jeong, Chang Hee Nam, “Fast scaling of energetic protons generated in the interaction oflinearly polarized femtosecond petawatt laser pulses with ultrathin targets”, High Energy Density Physics 17, 203-207 (2015)  |
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| 38 | Seung Beom Park, Kyungseung Kim, Kyoung Hwan Lee, Hyung Taek Kim, Chang Hee Nam, “Enhanced two‑color high‑harmonic generation achieved by adding an extra gas medium”, Appl. Phys. B 120, 723-729 (2015) |
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| 35 | Kyoung Hwan Lee, Hyeok Yun, Jae Hee Sung, Seong Ku Lee, Hwang Woon Lee, Hyung Taek Kim, and Chang Hee Nam, “Autocorrelation-subtracted Fourier transform holography method for large specimen imaging”, Appl. Phys. Lett. 106, 061103 (2015) (\*Corresponding author) |
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| 27 | Hyeok Yun, Hyung Taek Kim\*, Chul Min Kim, Chang Hee Nam, and Jongmin Lee, "Parity-selective enhancement of field-free molecular orientation in an intense two-color laser field," Phys. Rev. A 84 (6), 065401 (2011) (\*corresponding author) |
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| 21 | Il Woo Choi, Hyung Taek Kim, Nasr Hafz, Tae Jun Yu, Jae Hee Sung, Seong Ku Lee, Chul Min Kim, I Jong Kim, Young-Chul Noh, Do-Kyeong, “Target Diagnostic Systems for Proton, Electron, and X-ray Generation Experiments Based on Ultraintense Laser-Target Interactions,” J. Kor. Phys. Soc. 55, 517 (2009). |
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| 2 | **Hyung Taek Kim**, Dong Gun Lee, Kyung-Han Hong, Jung-Hun Kim, Il Woo Choi, and Chang Hee Nam, "Continuously tunable high-order harmonics from atoms in an intense femtosecond laser field," Phys. Rev. A 67, R051801 (2003).  |
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