

CCS International Symposium 2020

**12th symposium on Discovery, Fusion, Creation of New Knowledge
by Multidisciplinary Computational Sciences**

October 6, 2020

<https://www.ccs.tsukuba.ac.jp/sympo20201006en/>

Parallel Session 4: Material Science

Time: 16:20 – 17:37 (JST)

Place: <https://zoom.us/j/93856126019>

Convener: Atsushi Yamada (CCS, University of Tsukuba)

Time (5 + 2 min.)	Speaker (Affiliation)	Title
16:20 – 16:27	Mitsuharu Uemoto (Kobe Univ.)	First-principles electron-dynamics calculation for the interaction between the metasurface and extreme laser pulse
16:27 – 16:34	Tomoya Ono (Kobe Univ.)	Development of large scale multi-scale simulation platform and its applications
16:34 – 16:41	Yu-ichiro Matsushita (Tokyo Inst. Tech.)	Novel formation of SiC/SiO ₂ interfaces without thermal oxidation processes
16:41 – 16:48	XiaoMinTong (Univ. of Tsukuba)	Unification of the excitation and ionization of atoms in a strong elliptical laser field
16:48 – 16:55	Kenji Iida (Hokkaido Univ.)	Photoexcited Electron Dynamics in Nanostructures
16:55 – 17:02	Takuya Sekikawa (Niigata Univ.)	Superconductivity in WO ₃ nanowire based on first principles calculations and Tomonaga-Luttinger theory
17:02 – 17:09	Hiroyasu Koizumi (Univ. of Tsukuba)	Electronic state calculation for superconducting cuprates using a two-layer model
17:09 – 17:16	Toshiaki Hayashi (NTT)	Effective medium approximation for variable range hopping
17:16 – 17:23	Nobuhiko Kobayashi (Univ. of Tsukuba)	Theory of organic devices by large-scale first-principles charge transport calculations
17:23 – 17:30	Kota Honda (Univ. of Tsukuba)	Molecular dynamics simulation for the elucidation of the molecular diffusion behavior in the CO ₂ hydrate
17:30 – 17:37	Atsushi Yamada (Univ. of Tsukuba)	Maxwell + MD multiscale simulation for vibrational spectroscopy