

# **LIST OF PUBLICATIONS**

## **(Scientific Papers)**

### **Masakazu Aono**

431. Mechanism for conducting filament growth in self-assembled polymer thin films for redox-based atomic switches,  
K. Krishnan, T. Tsuruoka, C.R. Mannequin, and M. Aono  
Adv. Mater. 28 (2016) 640-648.
430. The way to nanoarchitectonics and the way of nanoarchitectonics,  
M. Aono and K. Ariga ,  
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429. On-surface synthesis of single conjugated polymer chains for single-molecule devices,  
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428. Controlled fabrication of silk protein sericin mediated hierarchical hybrid flowers and their excellent adsorption capability of heavy metal ions of Pb(II) Cd(II) and Hg(II),  
P. Koley, M. Sakurai, and M. Aono,  
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427. Direct observation of anodic dissolution and filament growth behavior in polyethylene-oxide-based atomic switch structures,  
K. Krishnan, T. Tsuruoka, and M. Aono,  
Jpn. J. Appl. Phys 55 (2016) 06GK02-1.
426. Humidity effects on the redox reactions and ionic transport in a Cu/Ta<sub>2</sub>O<sub>5</sub>/Pt atomic switch structure,  
T. Tsuruoka, I. Valov, C.R. Mannequin, T. Hasegawa, R. Waser, and M. Aono,  
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425. Decision maker based on atomic switches,  
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424. In-situ tuning of magnetization and magnetoresistance in Fe<sub>3</sub>O<sub>4</sub> thin film achieved with all-solid-state redox device,  
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422. Composition of thin Ta<sub>2</sub>O<sub>5</sub> films deposited by different methods and the effect of humidity on their resistive switching behavior,  
C.R. Mannequin, T. Tsuruoka, T. Hasegawa, and M. Aono,  
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421. Nanoionic devices enabling a multitude of new features,  
K. Terabe, T. Tsuchiya, R. Yang, and M. Aono,

- Nanoscale 8 (2016) 13873-13879.
420. Identification and roles of nonstoichiometric oxygen in amorphous Ta<sub>2</sub>O<sub>5</sub> thin films deposited by electron beam and sputtering processes,  
C.R. Mannequin, T. Tsuruoka, T. Hasegawa, and M. Aono,  
Appl. Surf. Sci. 385 (2016) 426-435.
419. Kinetic factors determining conducting filament formation in solid polymer electrolyte based planar Devices,  
K. Krishnan, M. Aono, and T. Tsuruoka  
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418. Redox reactions at CuAg/Ta<sub>2</sub>O<sub>5</sub> interfaces and the effects of Ta<sub>2</sub>O<sub>5</sub> film density on the forming process in atomic switch structures,  
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417. Tunable morphology from 2D to 3D in the formation of hierarchical architectures from a self-assembling dipeptide: thermal-induced morphological transition to 1D nanostructures,  
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416. Dynamic moderation of an electric field using a SiO<sub>2</sub> switching layer in TaOx-based ReRAM,  
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415. Position detection and observation of a conducting filament hidden under a top electrode in a Ta<sub>2</sub>O<sub>5</sub>-based atomic switch,  
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408. In situ and non-volatile photoluminescence tuning and nanodomain writing demonstrated by all-solid-state devices based on graphene oxide,  
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