# Masato Tazawa

## List of Publications by Year in Descending Order



| | | | |
|---|---|---|---|
| 71 papers | 1,427 citations | 21 h-index | 36 g-index |
| 76 ext. papers | 1,548 ext. citations | 3 avg, IF | 3.99 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 71 | Ellipsometric study of the electronic behaviors of titanium-vanadium dioxide (TixV1−xO2) films for 0 ≤ x ≤ 1 during semiconductive-to-metallic phase transition. *Applied Physics Letters*, **2021**, 118, 081901 | 3.4 | 0 |
| 70 | Temperature dependence of optical constants of La0.7Sr0.3MnO3 thin films. *Applied Surface Science*, **2017**, 421, 866-869 | 6.7 | 3 |
| 69 | Self-Assembled Multilayer Structure and Enhanced Thermochromic Performance of Spinodally Decomposed TiO2-VO2 Thin Film. *ACS Applied Materials & Interfaces*, **2016**, 8, 7054-9 | 9.5 | 43 |
| 68 | Meso-scale wrinkled coatings to improve heat transfers of surfaces facing ambient air. *Applied Thermal Engineering*, **2015**, 87, 251-257 | 5.8 | 1 |
| 67 | 2 diffractometry of anisotropic holographic gratings composed of liquid crystal and polymer phases **2013**, | | 1 |
| 66 | Optical diffractometry of highly anisotropic holographic gratings formed by liquid crystal and polymer phase separation. *Physical Review E*, **2012**, 86, 061701 | 2.4 | 9 |
| 65 | Adsorption of Bromic Acid Ion in Water by the Reduced Titanium Oxide. *Materials Science Forum*, **2012**, 724, 97-100 | 0.4 | |
| 64 | Ellipsometric study of dielectric functions of Mg(1-y)Ca(y)H(x) thin films (0.03 .17). *Applied Optics*, **2011**, 50, 3879-84 | 0.2 | 1 |
| 63 | Thickness-Dependent Structural and Optical Properties of VO2Thin Films. *Japanese Journal of Applied Physics*, **2011**, 50, 020215 | 1.4 | 13 |
| 62 | Thickness-Dependent Structural and Optical Properties of VO2Thin Films. *Japanese Journal of Applied Physics*, **2011**, 50, 020215 | 1.4 | 9 |
| 61 | Solar Lighting An Outline of the State and Two Recent Examples. *Journal of the Institute of Electrical Engineers of Japan*, **2011**, 131, 155-158 | 0 | |
| 60 | Long-Term Optical and Thermal Examinations of Ceramic Wall System with Solar-Altitude Dependent Reflectance. *Advances in Science and Technology*, **2010**, 68, 53-58 | 0.1 | 1 |
| 59 | Effects of thermal modulation on diffraction in liquid crystal composite gratings. *Applied Optics*, **2010**, 49, 4633-40 | 0.2 | 10 |
| 58 | Thermal control of transmittance/diffraction states of holographic structures composed of polymer and liquid crystal phases. *Solar Energy Materials and Solar Cells*, **2010**, 94, 1747-1752 | 6.4 | 16 |
| 57 | Study on the PAN carbon-fiber-innovation for modeling a successful R&D management. *Synthesiology*, **2009**, 2, 154-164 | 0.1 | 5 |
| 56 | Wavelength multiplexing and tuning in nano-Ag/dielectric multilayers. *Applied Physics A: Materials Science and Processing*, **2009**, 94, 525-530 | 2.6 | 8 |
| 55 | Tunable optical properties of nano-Au on vanadium dioxide. *Optics Communications*, **2009**, 282, 896-902 | 2 | 23 |

| | | | |
|---|---|---|---|
| 54 | Control of anisotropic diffraction in liquid-crystal composite volume gratings. *Optics Letters*, **2008**, 33, 1521-3 | 3 | 5 |
| 53 | Electron injection assisted phase transition in a nano-Au-VO2 junction. *Applied Physics Letters*, **2008**, 93, 061911 | 3.4 | 51 |
| 52 | Nano-Ag on vanadium dioxide. II. Thermal tuning of surface plasmon resonance. *Journal of Applied Physics*, **2008**, 104, 053102 | 2.5 | 43 |
| 51 | Nano-Ag on vanadium dioxide. I. Localized spectrum tailoring. *Journal of Applied Physics*, **2008**, 104, 053101 | 2.5 | 32 |
| 50 | Control of thermochromic spectrum in vanadium dioxide by amorphous silicon suboxide layer. *Solar Energy Materials and Solar Cells*, **2008**, 92, 1279-1284 | 6.4 | 67 |
| 49 | Optical characterization of vanadium–titanium oxide films. *Thin Solid Films*, **2008**, 516, 4563-4567 | 2.2 | 17 |
| 48 | Optical Properties of Vanadium Dioxide Film during Semiconductive–Metallic Phase Transition. *Japanese Journal of Applied Physics*, **2007**, 46, L113-L116 | 1.4 | 80 |
| 47 | Two-step nitridation of photocatalytic TiO2 films by low energy ion irradiation. *Applied Surface Science*, **2007**, 254, 156-159 | 6.7 | 7 |
| 46 | Optical Characterization of Titanium–Vanadium Oxide Films. *Japanese Journal of Applied Physics*, **2007**, 46, 621-626 | 1.4 | 7 |
| 45 | Analysis of Anisotropic Diffraction Gratings Using Holographic Polymer-Dispersed Liquid Crystal. *Japanese Journal of Applied Physics*, **2007**, 46, 7341-7346 | 1.4 | 17 |
| 44 | Fabrication of photocatalytic heat-mirror with TiO2/TiN/TiO2 stacked layers. *Vacuum*, **2006**, 80, 732-735 | 3.7 | 29 |
| 43 | Surface plasmon resonance of silver nanoparticles on vanadium dioxide. *Journal of Physical Chemistry B*, **2006**, 110, 2051-6 | 3.4 | 75 |
| 42 | Optical constants of vacuum evaporated SiO film and an application. *Journal of Electroceramics*, **2006**, 16, 511-515 | 1.5 | 14 |
| 41 | Optical Constants of VO2 Thin Film and Solar Energy Control Window. *Netsu Bussei*, **2006**, 20, 109-114 | 0.1 | 1 |
| 40 | Electronic structure modification of ZnO and Al-doped ZnO films by ions. *Surface and Coatings Technology*, **2005**, 196, 50-55 | 4.4 | 28 |
| 39 | Thickness dependence of optical properties of VO2 thin films epitaxially grown on sapphire (0 0 0 1). *Applied Surface Science*, **2005**, 244, 449-452 | 6.7 | 103 |
| 38 | Room-Temperature Hydrogen Sensor Based on Pd-Capped Mg2Ni Thin Film. *Japanese Journal of Applied Physics*, **2004**, 43, L507-L509 | 1.4 | 21 |
| 37 | Tailoring of Luminous Transmittance upon Switching for Thermochromic VO2Films by Thickness Control. *Japanese Journal of Applied Physics*, **2004**, 43, 186-187 | 1.4 | 40 |

| | | | |
|---|---|---|---|
| 36 | Spectral selective radiating materials for direct radiative heating. *Solar Energy Materials and Solar Cells*, **2004**, 84, 459-466 | 6.4 | 5 |
| 35 | Optimization of antireflection coating for VO2-based energy efficient window. *Solar Energy Materials and Solar Cells*, **2004**, 83, 29-37 | 6.4 | 146 |
| 34 | Photo-catalytic heat mirror with a thick titanium dioxide layer. *Solar Energy Materials and Solar Cells* , **2004**, 84, 159-170 | 6.4 | 19 |
| 33 | Low-energy electron energy loss spectroscopy of rutile and anatase TiO2 films in the core electron excitation regions. *Surface Science*, **2004**, 566-568, 1030-1034 | 1.8 | 14 |
| 32 | Transparent ellipsometric memory with thin film multilayer structures. *Applied Surface Science*, **2003**, 212-213, 402-405 | 6.7 | 1 |
| 31 | Optical investigation of silicon nitride thin films deposited by r.f. magnetron sputtering. *Thin Solid Films*, **2003**, 425, 196-202 | 2.2 | 31 |
| 30 | Fabrication of multifunctional coating which combines low-e property and visible-light-responsive photocatalytic activity. *Thin Solid Films*, **2003**, 442, 217-221 | 2.2 | 56 |
| 29 | Diffuse reflection of ceramics coated with dielectric thin films. *Applied Optics*, **2003**, 42, 1352-9 | 1.7 | 5 |
| 28 | Optical Constants of Vanadium Dioxide Films and Design of a Solar Energy Control Window. *Materials Research Society Symposia Proceedings*, **2003**, 785, 1051 | | 3 |
| 27 | Optical confinement of the intermediate layer between Si and alumina substrate in thin film Si solar cells. *Solar Energy Materials and Solar Cells*, **2002**, 74, 267-274 | 6.4 | |
| 26 | A VO2-Based Multifunctional Window with Highly Improved Luminous Transmittance. *Japanese Journal of Applied Physics*, **2002**, 41, L278-L280 | 1.4 | 77 |
| 25 | Optical Confinement Properties of Crystalline Silicon Film on Ceramic Substrate. *Japanese Journal of Applied Physics*, **2002**, 41, 4586-4593 | 1.4 | 2 |
| 24 | FT-IR Spectroscopic Investigations on the Formation of Zn2SiO4:Mn2+ Fluorescent Thin Film by Spray Pyrolysis.. *Journal of the Ceramic Society of Japan*, **2002**, 110, 211-214 | | |
| 23 | IR properties of SiO deposited on V1WxO2 thermochromic films by vacuum evaporation. *Thin Solid Films*, **2000**, 375, 100-103 | 2.2 | 8 |
| 22 | Optical Properties and Radiative Cooling Power of White Paints **2000**, 485-488 | | |
| 21 | Preparation and optical transmittance of titanium hydride (deutende) films by rf reactive sputtering. *Thin Solid Films*, **1999**, 343-344, 195-198 | 2.2 | 6 |
| 20 | High-energy Cu and O ion co-implantation into silica glasses. *Nuclear Instruments & Methods in Physics Research B*, **1998**, 141, 246-251 | 1.2 | 20 |
| 19 | High-energy co-implantation of Ti and O ions into sapphire. *Materials Chemistry and Physics*, **1998**, 54, 342-345 | 4.4 | 7 |

| | | | |
|---|---|---|---|
| 18 | Apatite Formation on TiO2 Photocatalyst Film in a Pseudo Body Solution. *Materials Research Bulletin*, **1998**, 33, 125-131 | 5.1 | 66 |
| 17 | New material design with V1−WxO2 film for sky radiator to obtain temperature stability. *Solar Energy*, **1998**, 64, 3-7 | 6.8 | 25 |
| 16 | Optical constants of V(1-x)W(x)O(2) Films. *Applied Optics*, **1998**, 37, 1858-61 | 1.7 | 73 |
| 15 | Annealing of Silica Glasses Implanted with High-Energy Copper Ions. *Japanese Journal of Applied Physics*, **1997**, 36, 7681-7685 | 1.4 | 6 |
| 14 | Optical properties of alumina ceramics as a substrate of thin film solar cells. *Solar Energy Materials and Solar Cells*, **1997**, 48, 315-320 | 6.4 | 5 |
| 13 | Étude de la variation de la longueur de London entre 5 et 70 K, dans un film très mince d'YBa2Cu3O7−δ par spectrométrie dans l'infrarouge lointain; comparaison avec NbN. *Comptes Rendus De L'Académie Des Sciences - Series IIB - Mechanics-Physics-Chemistry-Astronomy*, **1997**, 324, 389-397 | | |
| 12 | Thin film used to obtain a constant temperature lower than the ambient. *Thin Solid Films*, **1996**, 281-282, 232-234 | 2.2 | 23 |
| 11 | Changes in surface morphology and optical properties of polymers induced by ion implantation. *Thin Solid Films*, **1996**, 281-282, 529-532 | 2.2 | 12 |
| 10 | Adaptation of the sheet resistance of an YBaCuO layer to the substrate impedance, applications. *Journal of Infrared, Millimeter and Terahertz Waves*, **1996**, 17, 693-704 | | |
| 9 | On the use of high-Tc superconductors for Perot-Fabry mirrors coatings. *Journal of Infrared, Millimeter and Terahertz Waves*, **1995**, 16, 1173-1187 | | 1 |
| 8 | Residual losses of superconducting thin films of YBa2Cu3O7−δ in the far infrared and microwaves Applications. *Physica C: Superconductivity and Its Applications*, **1995**, 245, 219-230 | 1.3 | 9 |
| 7 | Optical constants of V1-xWxO2 thermochromic films and their application to the selective radiating material **1995**, | | 3 |
| 6 | Computational design of SiO-based spectral selective radiating film **1994**, | | 6 |
| 5 | Thermochromism of metal-doped VO2 films deposited by dual-target sputtering **1994**, 2255, 415 | | 3 |
| 4 | Far-infrared spectra of magnesium oxide. *Applied Optics*, **1994**, 33, 57-9 | 1.7 | 12 |
| 3 | Surface layers and far infrared spectra of High-Tc superconductors. *Infrared Physics*, **1993**, 34, 501-511 | | |
| 2 | A new spectroscopic method using the Fraunhofer diffraction pattern. *Journal of Infrared, Millimeter and Terahertz Waves*, **1984**, 5, 985-996 | | 1 |
| 1 | A New Method of Grating Spectroscopy. *Japanese Journal of Applied Physics*, **1983**, 22, L400-L402 | 1.4 | 2 |