

Takafumi Uemura

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

97
papers

3,173
citations

31
h-index

54
g-index

105
ext. papers

3,491
ext. citations

7.8
avg, IF

4.93
L-index

| # | Paper | IF | Citations |
|----|--|------|-----------|
| 97 | Heterogeneous Functional Dielectric Patterns for Charge-Carrier Modulation in Ultraflexible Organic Integrated Circuits (Adv. Mater. 45/2021). <i>Advanced Materials</i> , 2021 , 33, 2170358 | 24 | |
| 96 | Imperceptible energy harvesting device and biomedical sensor based on ultraflexible ferroelectric transducers and organic diodes. <i>Nature Communications</i> , 2021 , 12, 2399 | 17.4 | 29 |
| 95 | Heterogeneous Functional Dielectric Patterns for Charge-Carrier Modulation in Ultraflexible Organic Integrated Circuits. <i>Advanced Materials</i> , 2021 , 33, e2104446 | 24 | 3 |
| 94 | Mobility enhancement of DNNT and BTBT derivative organic thin-film transistors by triptycene molecule modification. <i>Organic Electronics</i> , 2021 , 96, 106219 | 3.5 | 4 |
| 93 | Rapid improvements in charge carrier mobility at ionic liquid/pentacene single crystal interfaces by self-cleaning. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 6131-6135 | 3.6 | 4 |
| 92 | Imperceptible magnetic sensor matrix system integrated with organic driver and amplifier circuits. <i>Science Advances</i> , 2020 , 6, eaay6094 | 14.3 | 39 |
| 91 | Probing inter-molecular interactions of dinaphthothienothiophene (DNNT) molecules in a transistor device using low-frequency Raman spectroscopy. <i>Applied Physics Express</i> , 2020 , 13, 022010 | 2.4 | 2 |
| 90 | Flexible neural interfaces for brain implants—the pursuit of thinness and high density. <i>Flexible and Printed Electronics</i> , 2020 , 5, 043002 | 3.1 | 5 |
| 89 | Wireless Monitoring Using a Stretchable and Transparent Sensor Sheet Containing Metal Nanowires. <i>Advanced Materials</i> , 2020 , 32, e1902684 | 24 | 34 |
| 88 | Printable Transparent Microelectrodes toward Mechanically and Visually Imperceptible Electronics. <i>Advanced Intelligent Systems</i> , 2020 , 2, 2000093 | 6 | 11 |
| 87 | Fine printing method of silver nanowire electrodes with alignment and accumulation. <i>Nanotechnology</i> , 2019 , 30, 37LT03 | 3.4 | 12 |
| 86 | Raman Spectroscopic Studies of Dinaphthothienothiophene (DNNT). <i>Materials</i> , 2019 , 12, | 3.5 | 4 |
| 85 | Long-Term Implantable, Flexible, and Transparent Neural Interface Based on Ag/Au Core-Shell Nanowires. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1900130 | 10.1 | 29 |
| 84 | An ultraflexible organic differential amplifier for recording electrocardiograms. <i>Nature Electronics</i> , 2019 , 2, 351-360 | 28.4 | 62 |
| 83 | Highly-ordered Triptycene Modifier Layer Based on Blade Coating for Ultraflexible Organic Transistors. <i>Scientific Reports</i> , 2019 , 9, 9200 | 4.9 | 12 |
| 82 | Evaluating intrinsic mobility from transient terahertz conductivity spectra of microcrystal samples of organic molecular semiconductors. <i>Applied Physics Letters</i> , 2019 , 115, 143301 | 3.4 | |
| 81 | Ultralow-Noise Organic Transistors Based on Polymeric Gate Dielectrics with Self-Assembled Modifiers. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 41561-41569 | 9.5 | 5 |

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| 80 | Orientation analysis of pentacene molecules in organic field-effect transistor devices using polarization-dependent Raman spectroscopy. <i>Scientific Reports</i> , 2019 , 9, 15149 | 4.9 | 9 |
| 79 | Non-contact Laser Printing of Ag Nanowire-based Electrode with Photodegradable Polymers. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2019 , 32, 429-434 | 0.7 | 0 |
| 78 | Design of ultraflexible organic differential amplifier circuits for wearable sensor technologies 2018 , | | 10 |
| 77 | Boron-Stabilized Planar Neutral Radicals with Well-Balanced Ambipolar Charge-Transport Properties. <i>Journal of the American Chemical Society</i> , 2017 , 139, 14336-14339 | 16.4 | 56 |
| 76 | Enhanced electronic-transport modulation in single-crystalline VO nanowire-based solid-state field-effect transistors. <i>Scientific Reports</i> , 2017 , 7, 17215 | 4.9 | 9 |
| 75 | Growth Of Organic Semiconductor Thin Films with Multi-Micron Domain Size and Fabrication of Organic Transistors Using a Stencil Nanosieve. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 23314-23318 | 9.5 | 4 |
| 74 | Flexible organic TFT bio-signal amplifier using reliable chip component assembly process with conductive adhesive. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 1849-1852 | 0.9 | 3 |
| 73 | Flexible sensor sheet for real-time pressure monitoring in artificial knee joint during total knee arthroplasty. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2017 , 2017, 1591-1594 | 0.9 | 3 |
| 72 | Flexible electronics for bio-signal monitoring in implantable applications. <i>IEICE Electronics Express</i> , 2017 , 14, 20172003-20172003 | 0.5 | 3 |
| 71 | Interfacial Structural Investigations of Electric Double Layer Transistors Using Ionic Liquid: Relation between Microscopic Structures and Device Performances. <i>Hyomen Kagaku</i> , 2017 , 38, 419-424 | | |
| 70 | Wireless EEG patch sensor on forehead using on-demand stretchable electrode sheet and electrode-tissue impedance scanner. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 6286-6289 | 0.9 | 7 |
| 69 | The emergence of charge coherence in soft molecular organic semiconductors via the suppression of thermal fluctuations. <i>NPG Asia Materials</i> , 2016 , 8, e252-e252 | 10.3 | 17 |
| 68 | Implantable wireless 64-channel system with flexible ECoG electrode and optogenetics probe 2016 , | | 10 |
| 67 | Gradual improvements of charge carrier mobility at ionic liquid/rubrene single crystal interfaces. <i>Applied Physics Letters</i> , 2016 , 108, 083113 | 3.4 | 12 |
| 66 | Enhancement of the Exciton Coherence Size in Organic Semiconductor by Alkyl Chain Substitution. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 7941-7948 | 3.8 | 13 |
| 65 | On the Extraction of Charge Carrier Mobility in High-Mobility Organic Transistors. <i>Advanced Materials</i> , 2016 , 28, 151-5 | 24 | 163 |
| 64 | Ultraflexible and ultrathin polymeric gate insulator for 2 V organic transistor circuits. <i>Applied Physics Express</i> , 2016 , 9, 061602 | 2.4 | 23 |
| 63 | Correlation between thermal fluctuation effects and phase coherence factor in carrier transport of single-crystal organic semiconductors. <i>Applied Physics Letters</i> , 2015 , 106, 143302 | 3.4 | 13 |

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| 62 | Microscopic hole-transfer efficiency in organic thin-film transistors studied with charge-modulation spectroscopy. <i>Physical Review B</i> , 2015 , 91, | 3.3 | 9 |
| 61 | Molecularly clean ionic liquid/rubrene single-crystal interfaces revealed by frequency modulation atomic force microscopy. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 6794-800 | 3.6 | 16 |
| 60 | Coherent Phonon Dynamics in Singlet Fission of Rubrene Single Crystal. <i>Springer Proceedings in Physics</i> , 2015 , 218-221 | 0.2 | 2 |
| 59 | High-Mobility Organic Transistors with Wet-Etch-Patterned Top Electrodes: A Novel Patterning Method for Fine-Pitch Integration of Organic Devices. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1300124 | 4.6 | 38 |
| 58 | Materials and devices with applications in high-end organic transistors. <i>Thin Solid Films</i> , 2014 , 554, 19-262.2 | | 3 |
| 57 | High-performance solution-processable N-shaped organic semiconducting materials with stabilized crystal phase. <i>Advanced Materials</i> , 2014 , 26, 4546-51 | 24 | 164 |
| 56 | Ultrafast exciton dynamics in dinaphtho[2,3-b:2'3'-b']thieno[3,2-b]-thiophene thin films. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 7501-12 | 3.6 | 12 |
| 55 | Split-gate organic field-effect transistors for high-speed operation. <i>Advanced Materials</i> , 2014 , 26, 2983-824 | | 29 |
| 54 | Carrier dynamics of rubrene single-crystals revealed by transient broadband terahertz spectroscopy. <i>Applied Physics Letters</i> , 2014 , 105, 143302 | 3.4 | 15 |
| 53 | Clean surface processing of rubrene single crystal immersed in ionic liquid by using frequency modulation atomic force microscopy. <i>Applied Physics Letters</i> , 2014 , 104, 263102 | 3.4 | 15 |
| 52 | Coherent phonon dynamics in singlet fission of rubrene single crystal 2014 , | | 1 |
| 51 | V-shaped organic semiconductors with solution processability, high mobility, and high thermal durability. <i>Advanced Materials</i> , 2013 , 25, 6392-7 | 24 | 162 |
| 50 | Dinaphtho[1,2-b:2',1'-d]chalcogenophenes: Comprehensive Investigation of the Effect of the Chalcogen Atoms in the Phenacene-Type Electronic Cores. <i>Chemistry of Materials</i> , 2013 , 25, 3952-3956 | 9.6 | 43 |
| 49 | Structural investigation of ionic liquid/rubrene single crystal interfaces by using frequency-modulation atomic force microscopy. <i>Chemical Communications</i> , 2013 , 49, 10596-8 | 5.8 | 32 |
| 48 | Study of contact resistance of high-mobility organic transistors through comparisons. <i>Organic Electronics</i> , 2013 , 14, 2590-2595 | 3.5 | 39 |
| 47 | High-performance solution-processed organic transistors with electroless-plated electrodes. <i>Organic Electronics</i> , 2013 , 14, 2144-2147 | 3.5 | 7 |
| 46 | Inch-Size Solution-Processed Single-Crystalline Films of High-Mobility Organic Semiconductors. <i>Applied Physics Express</i> , 2013 , 6, 076503 | 2.4 | 86 |
| 45 | High-speed organic single-crystal transistors gated with short-channel air gaps: Efficient hole and electron injection in organic semiconductor crystals. <i>Organic Electronics</i> , 2013 , 14, 1656-1662 | 3.5 | 31 |

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| 44 | Investigation of Hole Transporting Properties in Thin-Film and Single-Crystal Organic Field-Effect Transistor Based on Dinaphtho[2,1-b:1'2'-d]thiophene. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 05DC10 | 1.4 | 3 |
| 43 | Single-crystal Field-effect Transistors with a Furan-containing Organic Semiconductor Having a Twisted Electronic System. <i>Chemistry Letters</i> , 2013 , 42, 654-656 | 1.7 | 19 |
| 42 | Organic Semiconductors: V-Shaped Organic Semiconductors With Solution Processability, High Mobility, and High Thermal Durability (Adv. Mater. 44/2013). <i>Advanced Materials</i> , 2013 , 25, 6306-6306 | 2.4 | |
| 41 | Charge modulation infrared spectroscopy of rubrene single-crystal field-effect transistors. <i>Applied Physics Letters</i> , 2013 , 102, 093301 | 3.4 | 10 |
| 40 | Retrieval of Electronic Spectra of Charge Carriers in Organic Field-Effect Transistors from Charge Modulation Reflectance Spectra Distorted by Optical Interference. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 062401 | 1.4 | 0 |
| 39 | Electroconductive Junction Au Nanoparticles. <i>Bulletin of the Chemical Society of Japan</i> , 2012 , 85, 957-961 | 3.1 | 18 |
| 38 | High-power three-dimensional polymer FETs. <i>Current Applied Physics</i> , 2012 , 12, S92-S95 | 2.6 | 3 |
| 37 | 3D Organic Field-Effect Transistors: Flexible Three-Dimensional Organic Field-Effect Transistors Fabricated by an Imprinting Technique (Adv. Mater. 38/2012). <i>Advanced Materials</i> , 2012 , 24, 5276-5276 | 2.4 | |
| 36 | Relaxation dynamics of photoexcited excitons in rubrene single crystals using femtosecond absorption spectroscopy. <i>Physical Review Letters</i> , 2012 , 109, 097403 | 7.4 | 20 |
| 35 | Temperature dependence of the Hall effect in pentacene field-effect transistors: Possibility of charge decoherence induced by molecular fluctuations. <i>Physical Review B</i> , 2012 , 85, | 3.3 | 46 |
| 34 | Band-like transport in solution-crystallized organic transistors. <i>Current Applied Physics</i> , 2012 , 12, S87-S91 | 2.6 | 59 |
| 33 | Flexible three-dimensional organic field-effect transistors fabricated by an imprinting technique. <i>Advanced Materials</i> , 2012 , 24, 5212-6, 5276 | 2.4 | 34 |
| 32 | High-performance organic transistors with high-k dielectrics: A comparative study on solution-processed single crystals and vacuum-deposited polycrystalline films of 2,9-didecyl-dinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene. <i>Applied Physics Letters</i> , 2012 , 101, 223304 | 3.4 | 31 |
| 31 | Hall-effect measurements probing the degree of charge-carrier delocalization in solution-processed crystalline molecular semiconductors. <i>Physical Review Letters</i> , 2011 , 107, 066601 | 7.4 | 94 |
| 30 | Patternable solution-crystallized organic transistors with high charge carrier mobility. <i>Advanced Materials</i> , 2011 , 23, 1626-9 | 2.4 | 303 |
| 29 | Solution-crystallized organic field-effect transistors with charge-acceptor layers: high-mobility and low-threshold-voltage operation in air. <i>Advanced Materials</i> , 2011 , 23, 3309-14 | 2.4 | 143 |
| 28 | High-speed flexible organic field-effect transistors with a 3D structure. <i>Advanced Materials</i> , 2011 , 23, 3047-51 | 2.4 | 53 |
| 27 | High electron mobility in air for N,N'-1H-perfluorobutyldicyanoperylene carboxydi-imide solution-crystallized thin-film transistors on hydrophobic surfaces. <i>Advanced Materials</i> , 2011 , 23, 3681-5 | 2.4 | 112 |

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| 26 | Organic Field-Effect Transistors: High Electron Mobility in Air for N,N'-1H,1H-Perfluorobutylidicyanoperylene Carboxydi-imide Solution-Crystallized Thin-Film Transistors on Hydrophobic Surfaces (Adv. Mater. 32/2011). <i>Advanced Materials</i> , 2011 , 23, 3680-3680 | 24 | |
| 25 | Charge transport and Hall effect in rubrene single-crystal transistors under high pressure. <i>Physical Review B</i> , 2011 , 84, | 3-3 | 51 |
| 24 | Optical pump-probe spectroscopy of photocarriers in rubrene single crystals. <i>Physical Review B</i> , 2011 , 83, | 3-3 | 31 |
| 23 | Three-Dimensional Organic Field-Effect Transistors Using Solution-Processed Thin Films of Benzothieno-Benzothiophene Derivatives. <i>Molecular Crystals and Liquid Crystals</i> , 2011 , 539, 58/[398]-62/[402] | 3-5 | 0 |
| 22 | High-power Organic Field-effect Transistors Using a Three-dimensional Structure. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1270, 1 | | |
| 21 | Hall Effect of Solution-crystallized and Vapor-deposited 2,7-Dioctylbenzothieno[3,2-b]Benzothiophene Field-effect Transistors. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1270, 1 | | 1 |
| 20 | High-power and high-speed organic three-dimensional transistors with submicrometer channels. <i>Applied Physics Letters</i> , 2010 , 97, 013301 | 3-4 | 23 |
| 19 | Air-Stable n-Channel Single-Crystal Field-Effect Transistors. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 01AB05 | 1-4 | |
| 18 | Very Low-Voltage Operation of Ionic Liquid-Gated n-Type Organic Field-Effect Transistors. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 01AB13 | 1-4 | 7 |
| 17 | Enhanced fluorescence by surface plasmon coupling of Au nanoparticles in an organic electroluminescence diode. <i>Applied Physics Letters</i> , 2010 , 96, 043307 | 3-4 | 136 |
| 16 | Free-electron-like Hall effect in high-mobility organic thin-film transistors. <i>Physical Review B</i> , 2010 , 81, | 3-3 | 50 |
| 15 | Monolithic complementary inverters based on organic single crystals. <i>Advanced Materials</i> , 2010 , 22, 3938-3941 | 3-4 | 24 |
| 14 | Reduced contact resistances in organic transistors with secondary gates on source and drain electrodes. <i>Applied Physics Letters</i> , 2009 , 95, 113308 | 3-4 | 17 |
| 13 | Comprehensive Evaluation of Electron Mobility for a Trifluoroacetyl-Terminated Electronegative Conjugated Oligomer. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 17189-17193 | 3-8 | 25 |
| 12 | Charge-transfer induced surface conductivity for a copper based inorganic-organic hybrid. <i>Applied Physics Letters</i> , 2009 , 95, 173104 | 3-4 | 24 |
| 11 | Air-stable n-channel single-crystal transistors with negligible threshold gate voltage. <i>Applied Physics Letters</i> , 2009 , 94, 053305 | 3-4 | 30 |
| 10 | Electrical properties of individual ZnO nanowires. <i>Nanotechnology</i> , 2009 , 20, 155203 | 3-4 | 44 |
| 9 | Very High Mobility in Solution-Processed Organic Thin-Film Transistors of Highly Ordered [1]Benzothieno[3,2-b]benzothiophene Derivatives. <i>Applied Physics Express</i> , 2009 , 2, 111501 | 2-4 | 238 |

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| 8 | Low-voltage operation of n-type organic field-effect transistors with ionic liquid. <i>Applied Physics Letters</i> , 2009 , 95, 103301 | 3.4 | 46 |
| 7 | Electronic functionalization of solid-to-liquid interfaces between organic semiconductors and ionic liquids: Realization of very high performance organic single-crystal transistors. <i>Applied Physics Letters</i> , 2008 , 93, 263305 | 3.4 | 50 |
| 6 | Spatially resolved detection of plasmon-enhanced fluorescence using scanning tunneling microscopy. <i>Surface and Interface Analysis</i> , 2008 , 40, 1050-1053 | 1.5 | 7 |
| 5 | Local-plasmon-enhanced up-conversion fluorescence from copper phthalocyanine. <i>Chemical Physics Letters</i> , 2007 , 448, 232-236 | 2.5 | 47 |
| 4 | Tunneling-current-induced light emission from individual carbon nanotubes. <i>Surface Science</i> , 2006 , 600, L15-L19 | 1.8 | 15 |
| 3 | Tunneling-Current-Induced Light Emission from Copper Phthalocyanine Thin Films. <i>E-Journal of Surface Science and Nanotechnology</i> , 2006 , 4, 559-562 | 0.7 | 6 |
| 2 | Syntheses and Thermal Properties of New Liquid Crystalline Materials Involving Tropolone. <i>Molecular Crystals and Liquid Crystals</i> , 1983 , 95, 287-297 | | 12 |
| 1 | Function point measurement tool for UML design specification | | 27 |