

# Shigehiko Yumura

## List of Publications by Year in descending order

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64  
papers

2,515  
citations

218677

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g-index

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all docs

65  
docs citations

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times ranked

1419  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Localization of actin and myosin for the study of ameboid movement in Dictyostelium using improved immunofluorescence.. Journal of Cell Biology, 1984, 99, 894-899.                    | 5.2  | 298       |
| 2  | Reversible cyclic AMP-dependent change in distribution of myosin thick filaments in Dictyostelium. Nature, 1985, 314, 194-196.   | 27.8 | 258       |
| 3  | Stretching Actin Filaments within Cells Enhances their Affinity for the Myosin II Motor Domain. PLoS ONE, 2011, 6, e26200.   | 2.5  | 135       |
| 4  | Chapter 19 Agar-Overlay Immunofluorescence: High-Resolution Studies of Cytoskeletal Components and Their Changes during Chemotaxis. Methods in Cell Biology, 1987, 28, 347-356.        | 1.1  | 125       |
| 5  | Myosin II dynamics and cortical flow during contractile ring formation in Dictyostelium cells. Journal of Cell Biology, 2001, 154, 137-146.  | 5.2  | 110       |
| 6  | Multiple Myosin II Heavy Chain Kinases: Roles in Filament Assembly Control and Proper Cytokinesis in Dictyostelium. Molecular Biology of the Cell, 2005, 16, 4256-4266.                | 2.1  | 78        |
| 7  | Recruitment of a myosin heavy chain kinase to actin-rich protrusions in Dictyostelium. Current Biology, 2001, 11, 708-713.   | 3.9  | 73        |
| 8  | Transport of Myosin II to the Equatorial Region without Its Own Motor Activity in Mitotic Dictyostelium Cells. Molecular Biology of the Cell, 1997, 8, 2089-2099.                      | 2.1  | 72        |
| 9  | Myosin II contributes to the posterior contraction and the anterior extension during the retraction phase in migrating Dictyostelium cells. Journal of Cell Science, 2003, 116, 51-60. | 2.0  | 71        |
| 10 | Actin-based propulsive forces and myosin-II-based contractile forces in migrating Dictyostelium cells. Journal of Cell Science, 2008, 121, 1314-1324.                                  | 2.0  | 69        |
| 11 | Dynamics of novel feet of Dictyostelium cells during migration. Journal of Cell Science, 2004, 117, 1443-1455.   | 2.0  | 67        |
| 12 | Multiple Mechanisms for Accumulation of Myosin II Filaments at the Equator During Cytokinesis. Traffic, 2008, 9, 2089-2099.  | 2.7  | 54        |
| 13 | Turnover and flow of the cell membrane for cell migration. Scientific Reports, 2017, 7, 12970.   | 3.3  | 54        |
| 14 | Introduction of Macromolecules into Living Dictyostelium Cells by Electroporation.. Cell Structure and Function, 1995, 20, 185-190.  | 1.1  | 50        |
| 15 | Filopodelike projections induced with dimethyl sulfoxide and their relevance to cellular polarity in Dictyostelium.. Journal of Cell Biology, 1983, 96, 857-865.                       | 5.2  | 49        |
| 16 | Actomyosin dynamics in chemotactic amoeboid movement of Dictyostelium. Cytoskeleton, 1986, 6, 662-673.   | 4.4  | 49        |
| 17 | Myosin II-Independent Cytokinesis in Dictyostelium. Its Mechanism and Implications.. Cell Structure and Function, 2000, 25, 1-10.  | 1.1  | 49        |
| 18 | PTEN is a mechanosensing signal transducer for myosin II localization in Dictyostelium cells. Genes To Cells, 2009, 14, 821-834.   | 1.2  | 48        |

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|----|--|-----|-----------|
| 19 | Myosins and cell dynamics in cellular slime molds. <i>International Review of Cytology</i> , 2003, 224, 173-225.   | 6.2 | 47        |
| 20 | Release of myosin II from the membrane-cytoskeleton of <i>Dictyostelium discoideum</i> mediated by heavy-chain phosphorylation at the foci within the cortical actin network. <i>Journal of Cell Biology</i> , 1992, 117, 1231-1239. | 5.2 | 43        |
| 21 | Talin couples the actomyosin cortex to the plasma membrane during rear retraction and cytokinesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 12992-12997.                  | 7.1 | 39        |
| 22 | Myosin II can be localized to the cleavage furrow and to the posterior region of <i>Dictyostelium amoebae</i> without control by phosphorylation of myosin heavy and light chains. , 1997, 36, 313-322.                              |     | 35        |
| 23 | Cell-scale dynamic recycling and cortical flow of the actin-myosin cytoskeleton for rapid cell migration. <i>Biology Open</i> , 2013, 2, 200-209.  | 1.2 | 35        |
| 24 | Molecular dynamics and forces of a motile cell simultaneously visualized by TIRF and force microscopies. <i>BioTechniques</i> , 2008, 44, 739-750.   | 1.8 | 34        |
| 25 | Fluorescence-mediated visualization of actin and myosin filaments in the contractile membrane-cytoskeleton complex of <i>Dictyostelium discoideum</i> .. <i>Cell Structure and Function</i> , 1990, 15, 355-364.                     | 1.1 | 32        |
| 26 | Cyclic stretch of the substratum using a shape-memory alloy induces directional migration in <i>Dictyostelium</i> cells. <i>BioTechniques</i> , 2009, 47, 757-767.   | 1.8 | 32        |
| 27 | [54] Agar overlay method: High-resolution immunofluorescence for the study of the contractile apparatus. <i>Methods in Enzymology</i> , 1986, 134, 573-580.  | 1.0 | 31        |
| 28 | Novel Myosin Heavy Chain Kinase Involved in Disassembly of Myosin II Filaments and Efficient Cleavage in Mitotic <i>Dictyostelium</i> Cells. <i>Molecular Biology of the Cell</i> , 2002, 13, 4333-4342.                             | 2.1 | 27        |
| 29 | Reorganization of Actin and Myosin II in <i>Dictyostelium Amoeba</i> during Stimulation by cAMP.. <i>Cell Structure and Function</i> , 1993, 18, 379-388.  | 1.1 | 26        |
| 30 | Architectural Dynamics of F-Actin in Eupodia Suggests Their Role in Invasive Locomotion in <i>Dictyostelium</i> . <i>Experimental Cell Research</i> , 1999, 249, 33-45.  | 2.6 | 23        |
| 31 | De novo formation of basal bodies in <i>Naegleria gruberi</i> . <i>Journal of Cell Biology</i> , 2005, 169, 719-724.   | 5.2 | 23        |
| 32 | A study of wound repair in <i>Dictyostelium</i> cells by using novel laserporation. <i>Scientific Reports</i> , 2018, 8, 7969.   | 3.3 | 23        |
| 33 | Immunoelectron microscopic studies of the ultrastructure of myosin filaments in <i>Dictyostelium discoideum</i> .. <i>Cell Structure and Function</i> , 1990, 15, 343-354.   | 1.1 | 23        |
| 34 | Rapid Translocation of Myosin II in Vegetative <i>Dictyostelium Amoebae</i> during Chemotactic Stimulation by Folic Acid.. <i>Cell Structure and Function</i> , 1994, 19, 143-151.   | 1.1 | 23        |
| 35 | Microtubule-Mediated Inositol Lipid Signaling Plays Critical Roles in Regulation of Blebbing. <i>PLoS ONE</i> , 2015, 10, e0137032.  | 2.5 | 23        |
| 36 | Dynamin contributes to cytokinesis by stabilizing actin filaments in the contractile ring. <i>Genes To Cells</i> , 2013, 18, 621-635.  | 1.2 | 21        |

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|----|--|-----|-----------|
| 37 | Multiple Parallelisms in Animal Cytokinesis. <i>International Review of Cytology</i> , 2004, 240, 377-432.   | 6.2 | 19        |
| 38 | A novel mitosis-specific dynamic actin structure in <i>Dictyostelium</i> cells. <i>Journal of Cell Science</i> , 2007, 120, 4302-4309.   | 2.0 | 18        |
| 39 | Traction force and its regulation during cytokinesis in <i>Dictyostelium</i> cells. <i>European Journal of Cell Biology</i> , 2017, 96, 515-528.   | 3.6 | 18        |
| 40 | A novel low-power laser-mediated transfer of foreign molecules into cells. <i>Scientific Reports</i> , 2016, 6, 22055.   | 3.3 | 17        |
| 41 | Strategies for enhancing gene expression in <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 3825-3834.  | 3.6 | 17        |
| 42 | Myosin II does not contribute to wound repair in <i>Dictyostelium</i> cells. <i>Biology Open</i> , 2014, 3, 966-973.   | 1.2 | 16        |
| 43 | Spatial Distribution of Fluorescently Labeled Actin in Living <i>Dictyostelium</i> Amoebae. <i>Cell Structure and Function</i> , 1996, 21, 189-197.  | 1.1 | 15        |
| 44 | A novel mode of cytokinesis without cell-substratum adhesion. <i>Scientific Reports</i> , 2017, 7, 17694.  | 3.3 | 14        |
| 45 | Ca <sup>2+</sup> -Calmodulin Dependent Wound Repair in <i>Dictyostelium</i> Cell Membrane. <i>Cells</i> , 2020, 9, 1058.   | 4.1 | 14        |
| 46 | Rapid redistribution of myosin II in living <i>Dictyostelium</i> amoebae, as revealed by fluorescent probes introduced by electroporation. <i>Protoplasma</i> , 1996, 192, 217-227.        | 2.1 | 13        |
| 47 | Molecular biological approaches to study myosin functions in cytokinesis of <i>Dictyostelium</i> . , 2000, 49, 136-144.  |     | 12        |
| 48 | Concerted Movement of Prestalk Cells in Migrating Slugs of <i>Dictyostelium</i> Revealed by the Localization of Myosin. <i>Development Growth and Differentiation</i> , 1992, 34, 319-328. | 1.5 | 11        |
| 49 | Regulation of the Total Cell Surface Area in Dividing <i>Dictyostelium</i> Cells. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 238.                                       | 3.7 | 11        |
| 50 | Dynammin-Like Protein B of <i>Dictyostelium</i> Contributes to Cytokinesis Cooperatively with Other Dynammins. <i>Cells</i> , 2019, 8, 781.  | 4.1 | 10        |
| 51 | Cytokinesis D is Mediated by Cortical Flow of Dividing Cells Instead of Chemotaxis. <i>Cells</i> , 2019, 8, 473.   | 4.1 | 10        |
| 52 | Contraction of <i>Dictyostelium</i> Ghosts Reconstituted with Myosin II. <i>Cell Structure and Function</i> , 1991, 16, 481-488.   | 1.1 | 10        |
| 53 | Dynamics of Myosin II Filaments during Wound Repair in Dividing Cells. <i>Cells</i> , 2021, 10, 1229.  | 4.1 | 7         |
| 54 | Manipulation of cell migration by laserporation-induced local wounding. <i>Scientific Reports</i> , 2019, 9, 4291.   | 3.3 | 6         |

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|----|---|-----|-----------|
| 55 | How does myosin II localize within a Dictyostelium cell?. Journal of Plant Research, 1997, 110, 501-510.  | 2.4 | 5         |
| 56 | Novel cellular tracks of migrating Dictyostelium cells. European Journal of Cell Biology, 1999, 78, 757-766.  | 3.6 | 5         |
| 57 | Translation enhancement by a Dictyostelium gene sequence in Escherichia coli. Applied Microbiology and Biotechnology, 2019, 103, 3501-3510.   | 3.6 | 5         |
| 58 | Cell behaviors within a confined adhesive area fabricated using novel micropatterning methods. PLoS ONE, 2022, 17, e0262632.  | 2.5 | 4         |
| 59 | An improved molecular tool for screening bacterial colonies using GFP expression enhanced by a Dictyostelium sequence. BioTechniques, 2020, 68, 91-95.  | 1.8 | 3         |
| 60 | A dynamic adder model™ for cell size homeostasis in Dictyostelium cells. Scientific Reports, 2021, 11, 13742.   | 3.3 | 2         |
| 61 | Deletion of gmfA induces keratocyte-like migration in Dictyostelium. FEBS Open Bio, 2021, , .   | 2.3 | 2         |
| 62 | A mechanism for the intracellular localization of myosin II filaments in the Dictyostelium amoeba. Journal of Cell Science, 1993, 105 (Pt 1), 233-42.   | 2.0 | 2         |
| 63 | 2P-202 Repeated stretch of substratum induces directional migration in Dictyostelium cells(The 46th Tj ETQq1 1 0.784314 rgBT /Ove   | 0.1 | 0         |
| 64 | 1K1612 P51 Stretching actin filaments within cells enhances their affinity for the myosin II motor domain(Cell biology 1,The 49th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2011, 51, S59. | 0.1 | 0         |