

1. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Kasai K. Smaller anterior subgenual cingulate volume mediates the effect of girls' early sexual maturation on negative psychobehavioral outcome. **Neuroimage** 209(2020) DOI:10.1016/j.neuroimage.2019.116478
2. Yoshida M.W., Yamada M., Goshima G. Moss kinesin-14 KCBP accelerates chromatid motility in anaphase. **Cell Structure and Function** 44, 95-104 (2019) DOI:10.1247/csf.19015
3. Tomiyama H., Nakao T., Murayama K., Nemoto K., Ikari K., Yamada S., Kuwano M., Hasuzawa S., Togao O., Hiwatashi A., Kanba S. Dysfunction between dorsal caudate and salience network associated with impaired cognitive flexibility in obsessive-compulsive disorder: A resting-state fMRI study. **NeuroImage: Clinical** 24(2019) DOI:10.1016/j.nicl.2019.102004
4. Serizawa T., Isotani A., Matsumura T., Nakanishi K., Nonaka S., Shibata S., Ikawa M., Okano H. Developmental analyses of mouse embryos and adults using a non-overlapping tracing system for all three germ layers. **Development (Cambridge)** 146(2019) DOI:10.1242/dev.174938
5. Saccenti L., Andica C., Hagiwara A., Yokoyama K., Takemura M.Y., Fujita S., Maekawa T., Kamagata K., Le Berre A., Hori M., Hattori N., Aoki S. Brain tissue and myelin volumetric analysis in multiple sclerosis at 3T MRI with various in-plane resolutions using synthetic MRI. **Neuroradiology** 61, 1219-27 (2019) DOI:10.1007/s00234-019-02241-w
6. Murata S., Tachibana Y., Murata K., Kamagata K., Hori M., Andica C., Suzuki M., Wada A., Kumamaru K., Hagiwara A., Irie R., Sato S., Hamasaki N., Fukunaga I., Hoshito H., Aoki S. Comparison of magnetization transfer contrast of conventional and simultaneous multislice turbo spin echo acquisitions focusing on excitation time interval. **Japanese Journal of Radiology** 37, 579-89 (2019) DOI:10.1007/s11604-019-00848-w
7. Maruyama D., Higashiyama T., Endo T., Nishikawa S.-i. Fertilization-Coupled Sperm Nuclear Fusion is Required for Normal Endosperm Nuclear Proliferation. **Plant and Cell Physiology** (2019) DOI:10.1093/pcp/pcz158
8. Kinjo T., Terai K., Horita S., Nomura N., Sumiyama K., Togashi K., Iwata S., Matsuda M. FRET-assisted photoactivation of flavoproteins for in vivo two-photon optogenetics. **Nature Methods** 16, 1029-36 (2019) DOI:10.1038/s41592-019-0541-5
9. Kakeda S., Watanabe K., Katsuki A., Sugimoto K., Ueda I., Igata N., Kishi T., Iwata N., Abe O., Yoshimura R., Korogi Y. Genetic effects on white matter integrity in drug-naïve patients with major depressive disorder: a diffusion tensor imaging study of 17 genetic loci associated with depressive symptoms. **Neuropsychiatric Disease and Treatment** 15, 375-83 (2019) DOI:10.2147/ndt.s190268
10. Hwang D., Wada S., Takahashi A., Urawa H., Kamei Y., Nishikawa S.-i. Development of a Heat-Inducible Gene Expression System Using Female Gametophytes of *Arabidopsis thaliana*. **Plant and Cell Physiology** (2019) DOI:10.1093/pcp/pcz148
11. Hayashi T., Hashitani H., Takeya M., Uemura K.I., Nakamura K.I., Igawa T. Properties of SK3 channel-expressing PDGFR α (+) cells in the rodent urinary bladder. **European Journal of Pharmacology** 860(2019) DOI:10.1016/j.ejphar.2019.172552
12. Griesbeck S., Michail E., Rauch F., Ogasawara H., Wang C., Sato Y., Edkins R.M., Zhang Z., Taki M., Lambert C., Yamaguchi S., Marder T.B. The Effect of Branching on the One- and Two-Photon Absorption, Cell Viability, and Localization of Cationic Triarylborane Chromophores with Dipolar versus Octupolar Charge Distributions for Cellular Imaging. **Chemistry - A European Journal** 25, 13164-75 (2019) DOI:10.1002/chem.201902461

13. Fujita S., Hagiwara A., Hori M., Warntjes M., Kamagata K., Fukunaga I., Andica C., Maekawa T., Irie R., Takemura M.Y., Kumamaru K.K., Wada A., Suzuki M., Ozaki Y., Abe O., Aoki S. Three-dimensional high-resolution simultaneous quantitative mapping of the whole brain with 3D-QALAS: An accuracy and repeatability study. **Magnetic Resonance Imaging** 63, 235-43 (2019) DOI:10.1016/j.mri.2019.08.031
14. Morita K., Miura K., Kasai K., Hashimoto R. Eye movement characteristics in schizophrenia: A recent update with clinical implications. **Neuropsychopharmacology Reports** (2019) DOI:10.1002/npr2.12087
15. Koshiyama D., Fukunaga M., Okada N., Morita K., Nemoto K., Usui K., Yamamori H., Yasuda Y., Fujimoto M., Kudo N., Azechi H., Watanabe Y., Hashimoto N., Narita H., Kusumi I., Ohi K., Shimada T., Kataoka Y., Yamamoto M., Ozaki N., Okada G., Okamoto Y., Harada K., Matsuo K., Yamasue H., Abe O., Hashimoto R., Takahashi T., Hori T., Nakataki M., Onitsuka T., Holleran L., Jahanshad N., van Erp T.G.M., Turner J., Donohoe G., Thompson P.M., Kasai K., Hashimoto R. White matter microstructural alterations across four major psychiatric disorders: mega-analysis study in 2937 individuals. **Molecular Psychiatry** (2019) DOI:10.1038/s41380-019-0553-7
16. Haruwaka K., Ikegami A., Tachibana Y., Ohno N., Konishi H., Hashimoto A., Matsumoto M., Kato D., Ono R., Kiyama H., Moorhouse A.J., Nabekura J., Wake H. Dual microglia effects on blood brain barrier permeability induced by systemic inflammation. **Nature Communications** 10(2019) DOI:10.1038/s41467-019-13812-z
17. Terai K., Imanishi A., Li C.J., Matsuda M. Two Decades of Genetically Encoded Biosensors Based on Forster Resonance Energy Transfer. **Cell Structure and Function** 44, 153-69 (2019) DOI:10.1247/csf.18035
18. Ito H., Tsunoda T., Riku M., Inaguma S., Inoko A., Murakami H., Ikeda H., Matsuda M., Kasai K. Indispensable role of STIL in the regulation of cancer cell motility through the lamellipodial accumulation of ARHGEF7–PAK1 complex. **Oncogene** (2019) DOI:10.1038/s41388-019-1115-9
19. Osawa T., Kotani T., Kawaoka T., Hirata E., Suzuki K., Nakatogawa H., Ohsumi Y., Noda N.N. Atg2 mediates direct lipid transfer between membranes for autophagosome formation. **Nature Structural & Molecular Biology** 26, 281-+ (2019) DOI:10.1038/s41594-019-0203-4
20. Nozoye T., von Wiren N., Sato Y., Higashiyama T., Nakanishi H., Nishizawa N.K. Characterization of the Nicotianamine Exporter ENA1 in Rice. **Frontiers in Plant Science** 10(2019) DOI:10.3389/fpls.2019.00502
21. Muta Y., Matsuda M., Imajo M. Divergent Dynamics and Functions of ERK MAP Kinase Signaling in Development, Homeostasis and Cancer: Lessons from Fluorescent Bioimaging. **Cancers** 11(2019) DOI:10.3390/cancers11040513
22. Murata K., Hirata A., Ohta K., Enaida H., Nakamura K. Morphometric analysis in mouse scleral fibroblasts using focused ion beam/scanning electron microscopy. **Scientific Reports** 9(2019) DOI:10.1038/s41598-019-42758-x
23. Hara S., Hori M., Ueda R., Hayashi S., Inaji M., Tanaka Y., Maehara T., Ishii K., Aoki S., Nariai T. Unraveling Specific Brain Microstructural Damage in Moyamoya Disease Using Diffusion Magnetic Resonance Imaging and Positron Emission Tomography. **Journal of Stroke & Cerebrovascular Diseases** 28, 1113-25 (2019) DOI:10.1016/j.jstrokecerebrovasdis.2018.12.038
24. Goto A., Otomo K., Nemotou T. Real-Time Polarization-Resolved Imaging of Living Tissues Based on Two-Photon Excitation Spinning-Disk Confocal Microscopy. **Frontiers in Physics** 7(2019) DOI:10.3389/fphy.2019.00056

25. Chougar L., Hagiwara A., Takano N., Andica C., Cohen-Adad J., Warntjes M., Maekawa T., Hori M., Koshino S., Nakazawa M., Abe O., Aoki S. Signal Intensity within Cerebral Venous Sinuses on Synthetic MRI. **Magnetic Resonance in Medical Sciences** (2019) DOI:10.2463/mrms.mp.2018-0144
26. Wang C.G., Taki M., Sato Y., Tamura Y., Yaginuma H., Okada Y., Yamaguchi S. A photostable fluorescent marker for the superresolution live imaging of the dynamic structure of the mitochondrial cristae. **Proceedings of the National Academy of Sciences of the United States of America** 116, 15817-22 (2019) DOI:10.1073/pnas.1905924116
27. Nakayama T., Nomura M., Takano Y., Tanifuji G., Shiba K., Inaba K., Inagaki Y., Kawata M. Single-cell genomics unveiled a cryptic cyanobacterial lineage with a worldwide distribution hidden by a dinoflagellate host. **Proceedings of the National Academy of Sciences of the United States of America** 116, 15973-8 (2019) DOI:10.1073/pnas.1902538116
28. Murakoshi H., Horiuchi H., Kosugi T., Onda M., Sato A., Koga N., Nabekura J. ShadowR: a novel chromoprotein with reduced non-specific binding and improved expression in living cells. **Scientific Reports** 9(2019) DOI:10.1038/s41598-019-48604-4
29. Andica C., Kamagata K., Hatano T., Saito A., Uchida W., Ogawa T., Takeshige-Amano H., Zalesky A., Wada A., Suzuki M., Hagiwara A., Irie R., Hori M., Kumamaru K.K., Oyama G., Shimo Y., Umemura A., Pantelis C., Hattori N., Aoki S. Free-Water Imaging in White and Gray Matter in Parkinson's Disease. **Cells** 8, 18 (2019) DOI:10.3390/cells8080839
30. Fujita S., Hagiwara A., Hori M., Warntjes M., Kamagata K., Fukunaga I., Goto M., Takuya H., Takasu K., Andica C., Maekawa T., Takemura M.Y., Irie R., Wada A., Suzuki M., Aoki S. 3D quantitative synthetic MRI-derived cortical thickness and subcortical brain volumes: Scan-rescan repeatability and comparison with conventional T-1-weighted images. **Journal of Magnetic Resonance Imaging** 50, 1834-42 (2019) DOI:10.1002/jmri.26744
31. Sasaki T., Tsutsumi M., Otomo K., Murata T., Yagi N., Nakamura M., Nemoto T., Hasebe M., Oda Y. A Novel Katanin-Tethering Machinery Accelerates Cytokinesis. **Current Biology** 29, 4060-+ (2019) DOI:10.1016/j.cub.2019.09.049
32. Nishikawa T., Narita H., Ogi S., Sato Y., Yamaguchi S. Hydrophobicity and CH/ π -interaction-driven self-assembly of amphiphilic aromatic hydrocarbons into nanosheets. **Chemical Communications** 55, 14950-3 (2019) DOI:10.1039/c9cc08070h
33. Matsumoto M., Sawada M., Garcia-Gonzalez D., Herranz-Perez V., Ogino T., Nguyen H.B., Thai T.Q., Narita K., Kumamoto N., Ugawa S., Saito Y., Takeda S., Kaneko N., Khodosevich K., Monyer H., Garcia-Verdugo J.M., Ohno N., Sawamoto K. Dynamic Changes in Ultrastructure of the Primary Cilium in Migrating Neuroblasts in the Postnatal Brain. **Journal of Neuroscience** 39, 9967-88 (2019) DOI:10.1523/jneurosci.1503-19.2019
34. Yasuda Y., Okada N., Nemoto K., Fukunaga M., Yamamori H., Ohi K., Koshiyama D., Kudo N., Shiino T., Morita S., Morita K., Azechi H., Fujimoto M., Miura K., Watanabe Y., Kasai K., Hashimoto R. Brain morphological and functional features in cognitive subgroups of schizophrenia. **Psychiatry and Clinical Neurosciences** (2019) DOI:10.1111/pcn.12963
35. Andica C., Kamagata K., Hatano T., Saito Y., Ogaki K., Hattori N., Aoki S. MR biomarkers of degenerative brain disorders derived from diffusion imaging. **Journal of Magnetic Resonance Imaging** (2019) DOI:10.1002/jmri.27019
36. Sone E., Noshiro D., Ikebuchi Y., Nakagawa M., Khan M., Tamura Y., Ikeda M., Oki M., Murali R., Fujimori T., Yoda T., Honma M., Suzuki H., Ando T., Aoki K. The induction of RANKL molecule clustering could stimulate early osteoblast differentiation. **Biochemical and Biophysical Research Communications** 509, 435-40 (2019) DOI:10.1016/j.bbrc.2018.12.093

37. Shimahara Y., Sugawara K., Kojo K.H., Kawai H., Yoshida Y., Hasezawa S., Kutsuna N. IMACEL: A cloud-based bioimage analysis platform for morphological analysis and image classification. **Plos One** 14(2019) DOI:10.1371/journal.pone.0212619
38. Maekawa T., Hagiwara A., Hori M., Andica C., Haruyama T., Kuramochi M., Nakazawa M., Koshino S., Irie R., Kamagata K., Wada A., Abe O., Aoki S. Effect of Gadolinium on the Estimation of Myelin and Brain Tissue Volumes Based on Quantitative Synthetic MRI. **American Journal of Neuroradiology** 40, 231-7 (2019) DOI:10.3174/ajnr.A5921
39. Kiyonari H., Kaneko M., Abe T., Shioi G., Aizawa S., Furuta Y., Fujimori T. Dynamic organelle localization and cytoskeletal reorganization during preimplantation mouse embryo development revealed by live imaging of genetically encoded fluorescent fusion proteins. **Genesis** 57(2019) DOI:10.1002/dvg.23277
40. Kimata Y., Kato T., Higaki T., Kurihara D., Yamada T., Segami S., Morita M.T., Maeshima M., Hasezawa S., Higashiyama T., Tasaka M., Ueda M. Polar vacuolar distribution is essential for accurate asymmetric division of Arabidopsis zygotes. **Proceedings of the National Academy of Sciences of the United States of America** 116, 2338-43 (2019) DOI:10.1073/pnas.1814160116
41. Hagiwara A., Otsuka Y., Hori M., Tachibana Y., Yokoyama K., Fujita S., Andica C., Kamagata K., Irie R., Koshino S., Maekawa T., Chougar L., Wada A., Takemura M.Y., Hattori N., Aoki S. Improving the Quality of Synthetic FLAIR Images with Deep Learning Using a Conditional Generative Adversarial Network for Pixel-by-Pixel Image Translation. **American Journal of Neuroradiology** 40, 224-30 (2019) DOI:10.3174/ajnr.A5927
42. Fujita S., Nakazawa M., Hagiwara A., Ueda R., Horita M., Maekawa T., Irie R., Andica C., Kunishima Kumamaru K., Hori M., Aoki S. Estimation of Gadolinium-based Contrast Agent Concentration Using Quantitative Synthetic MRI and Its Application to Brain Metastases: A Feasibility Study. **Magnetic Resonance in Medical Sciences** (2019) DOI:10.2463/mrms.mp.2018-0119
43. Suzuki A.Z., Sekine R., Takeda S., Aikawa R., Shiraishi Y., Hamaguchi T., Okuno H., Tamamura H., Furuta T. A clickable caging group as a new platform for modular caged compounds with improved photochemical properties. **Chemical Communications** 55, 451-4 (2019) DOI:10.1039/c8cc07981a
44. Soltysik K., Ohsaki Y., Tatematsu T., Cheng J.L., Fujimoto T. Nuclear lipid droplets derive from a lipoprotein precursor and regulate phosphatidylcholine synthesis. **Nature Communications** 10(2019) DOI:10.1038/s41467-019-08411-x
45. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Edden R.A.E., Barker P.B., Sawa A., Kasai K. Neurometabolic and functional connectivity basis of prosocial behavior in early adolescence. **Scientific Reports** 9(2019) DOI:10.1038/s41598-018-38355-z
46. Hagiwara A., Hori M., Cohen-Adad J., Nakazawa M., Suzuki Y., Kasahara A., Horita M., Haruyama T., Andica C., Maekawa T., Kamagata K., Kumamaru K.K., Abe O., Aoki S. Linearity, Bias, Intrascanner Repeatability, and Interscanner Reproducibility of Quantitative Multidynamic Multiecho Sequence for Rapid Simultaneous Relaxometry at 3 T A Validation Study With a Standardized Phantom and Healthy Controls. **Investigative Radiology** 54, 39-47 (2019) DOI:10.1097/rli.0000000000000510
47. Yoon Y., Park J., Taniguchi A., Kohsaka H., Nakae K., Nonaka S., Ishii S., Nose A. System level analysis of motor-related neural activities in larval Drosophila. **Journal of Neurogenetics** 33, 179-89 (2019) DOI:10.1080/01677063.2019.1605365

48. Andica C., Hagiwara A., Hori M., Kamagata K., Koshino S., Maekawa T., Suzuki M., Fujiwara H., Ikeno M., Shimizu T., Suzuki H., Sugano H., Arai H., Aoki S. Review of synthetic MRI in pediatric brains: Basic principle of MR quantification, its features, clinical applications, and limitations. **Journal of Neuroradiology** 46, 268-75 (2019) DOI:10.1016/j.neurad.2019.02.005
49. Tanaka H., Okazaki T., Aoyama S., Yokota M., Koike M., Okada Y., Fujiki Y., Gotoh Y. Peroxisomes control mitochondrial dynamics and the mitochondrion-dependent apoptosis pathway. **Journal of Cell Science** 132(2019) DOI:10.1242/jcs.224766
50. Takaki T., Ohno N., Saitoh S., Nagai M., Joh K. Podocyte penetration of the glomerular basement membrane to contact on the mesangial cell at the lesion of mesangial interposition in lupus nephritis: a three-dimensional analysis by serial block-face scanning electron microscopy. **Clinical and Experimental Nephrology** 23, 773-81 (2019) DOI:10.1007/s10157-019-01701-0
51. Nishimura A., Shimoda K., Tanaka T., Toyama T., Nishiyama K., Shinkai Y., Numaga-Tomita T., Yamazaki D., Kanda Y., Akaike T., Kumagai Y., Nishida M. Depolysulfidation of Drp1 induced by low-dose methylmercury exposure increases cardiac vulnerability to hemodynamic overload. **Science Signaling** 12(2019) DOI:10.1126/scisignal.aaw1920
52. Nakamura M., Takahashi T., Takayanagi Y., Sasabayashi D., Katagiri N., Sakuma A., Obara C., Koike S., Yamasue H., Furuichi A., Kido M., Nishikawa Y., Noguchi K., Matsumoto K., Mizuno M., Kasai K., Suzuki M. Surface morphology of the orbitofrontal cortex in individuals at risk of psychosis: a multicenter study. **European Archives of Psychiatry and Clinical Neuroscience** 269, 397-406 (2019) DOI:10.1007/s00406-018-0890-6
53. Li J.L., Suda K., Ueoka I., Tanaka R., Yoshida H., Okada Y., Okamoto Y., Hiramatsu Y., Takashima H., Yamaguchi M. Neuron-specific knockdown of Drosophila HADHB induces a shortened lifespan, deficient locomotive ability, abnormal motor neuron terminal morphology and learning disability. **Experimental Cell Research** 379, 150-8 (2019) DOI:10.1016/j.yexcr.2019.03.040
54. Katsuno T., Belyantseva I.A., Cartagena-Rivera A.X., Ohta K., Crump S.M., Petralia R.S., Ono K., Tona R., Imtiaz A., Rehman A., Kiyonari H., Kaneko M., Wang Y.X., Abe T., Ikeya M., Fenollar-Ferrer C., Riordan G.P., Wilson E.A., Fitzgerald T.S., Segawa K., Omori K., Ito J., Frolenkov G.I., Friedman T.B., Kitajiri S. TRIOBP-5 sculpts stereocilia rootlets and stiffens supporting cells enabling hearing. **Jci Insight** 4(2019) DOI:10.1172/jci.insight.128561
55. Griesbeck S., Ferger M., Czernetzi C., Wang C.G., Bertermann R., Friedrich A., Haehnel M., Sieh D., Taki M., Yamaguchi S., Marder T.B. Optimization of Aqueous Stability versus pi-Conjugation in Tetracationic Bis(triarylborane) Chromophores: Applications in Live-Cell Fluorescence Imaging. **Chemistry-a European Journal** 25, 7679-88 (2019) DOI:10.1002/chem.201900723
56. Goto N., Fukuda A., Yamaga Y., Yoshikawa T., Maruno T., Maekawa H., Inamoto S., Kawada K., Sakai Y., Miyoshi H., Taketo M.M., Chiba T., Seno H. Lineage tracing and targeting of IL17RB(+) tuft cell-like human colorectal cancer stem cells. **Proceedings of the National Academy of Sciences of the United States of America** 116, 12996-3005 (2019) DOI:10.1073/pnas.1900251116
57. Fujiwara D., Iwahara N., Sebori R., Hosoda R., Shimohama S., Kuno A., Horio Y. SIRT1 deficiency interferes with membrane resealing after cell membrane injury. **Plos One** 14(2019) DOI:10.1371/journal.pone.0218329
58. Fujioka T., Kaneko N., Sawamoto K. Blood vessels as a scaffold for neuronal migration. **Neurochemistry International** 126, 69-73 (2019) DOI:10.1016/j.neuint.2019.03.001

59. Yamamoto K., Otomo K., Nemoto T., Ishihara S., Haga H., Nagasaki A., Murakami Y., Takahashi M. Differential contributions of nonmuscle myosin IIA and IIB to cytokinesis in human immortalized fibroblasts. *Experimental Cell Research* 376, 67-76 (2019) DOI:10.1016/j.yexcr.2019.01.020
60. Shimahara Y., Kutsuna N., Hasezawa S., Kojo K.H. Quantitative Evaluation of Stromule Frequency at Hourly Intervals in Arabidopsis Stomatal Guard Cell Chloroplasts. *Cytologia* 84, 31-5 (2019) DOI:10.1508/cytologia.84.31
61. Kubota-Kawai H., Burton-Smith R.N., Tokutsu R., Song C.H., Akimoto S., Yokono M., Ueno Y., Kim E., Watanabe A., Murata K., Minagawa J. Ten antenna proteins are associated with the core in the supramolecular organization of the photosystem I supercomplex in *Chlamydomonas reinhardtii*. *Journal of Biological Chemistry* 294, 4304-14 (2019) DOI:10.1074/jbc.RA118.006536
62. Katagiri N., Pantelis C., Nemoto T., Tsujino N., Saito J., Hori M., Yamaguchi T., Funatogawa T., Mizuno M. Longitudinal changes in striatum and sub-threshold positive symptoms in individuals with an 'at risk mental state' (ARMS). *Psychiatry Research-Neuroimaging* 285, 25-30 (2019) DOI:10.1016/j.psychres.2019.01.008
63. Sekiguchi T., Satoh T., Kurimoto E., Song C.H., Kozai T., Watanabe H., Ishii K., Yagi H., Yanaka S., Uchiyama S., Uchihashi T., Murata K., Kato K. Mutational and Combinatorial Control of Self-Assembling and Disassembling of Human Proteasome Subunits. *International Journal of Molecular Sciences* 20(2019) DOI:10.3390/ijms20092308
64. Okada N., Ando S., Sanada M., Hirata-Mogi S., Iijima Y., Sugiyama H., Shirakawa T., Yamagishi M., Kanehara A., Morita M., Yagi T., Hayashi N., Koshiyama D., Morita K., Sawada K., Ikegame T., Sugimoto N., Toriyama R., Masaoka M., Fujikawa S., Kanata S., Tada M., Kirihaara K., Yahata N., Araki T., Jinde S., Kano Y., Koike S., Endo K., Yamasaki S., Nishida A., Hiraiwa-Hasegawa M., Bundo M., Iwamoto K., Tanaka S.C., Kasai K. Population-neuroscience study of the Tokyo TEEN Cohort (pn-TTC): Cohort longitudinal study to explore the neurobiological substrates of adolescent psychological and behavioral development. *Psychiatry and Clinical Neurosciences* 73, 231-42 (2019) DOI:10.1111/pcn.12814
65. Kamemizu C., Fujimori T. Distinct dormancy progression depending on embryonic regions during mouse embryonic diapause. *Biology of Reproduction* 100, 1204-14 (2019) DOI:10.1093/biolre/ioz017
66. Inagaki S., Agetsuma M., Ohara S., Iijima T., Yokota H., Wazawa T., Arai Y., Nagai T. Imaging local brain activity of multiple freely moving mice sharing the same environment. *Scientific Reports* 9(2019) DOI:10.1038/s41598-019-43897-x
67. Griesbeck S., Michail E., Wang C.G., Ogasawara H., Lorenzen S., Gerstner L., Zang T., Nitsch J., Sato Y., Bertermann R., Taki M., Lambert C., Yamaguchi S., Marder T.B. Tuning the pi-bridge of quadrupolar triarylborane chromophores for one- and two-photon excited fluorescence imaging of lysosomes in live cells. *Chemical Science* 10, 5405-22 (2019) DOI:10.1039/c9sc00793h
68. Andica C., Hagiwara A., Kamagata K., Yokoyama K., Shimoji K., Saito A., Takenaka Y., Nakazawa M., Hori M., Cohen-Adad J., Takemura M.Y., Hattori N., Aoki S. Gray Matter Alterations in Early and Late Relapsing-Remitting Multiple Sclerosis Evaluated with Synthetic Quantitative Magnetic Resonance Imaging. *Scientific Reports* 9(2019) DOI:10.1038/s41598-019-44615-3
69. Ieda T., Tazawa H., Okabayashi H., Yano S., Shigeyasu K., Kuroda S., Ohara T., Noma K., Kishimoto H., Nishizaki M., Kagawa S., Shirakawa Y., Saitou T., Imamura T., Fujiwara T. Visualization of epithelial-mesenchymal transition in an inflammatory microenvironment-colorectal cancer network. *Scientific Reports* 9(2019) DOI:10.1038/s41598-019-52816-z

70. Hara S., Tanaka Y., Hayashi S., Inaji M., Maehara T., Hori M., Aoki S., Ishii K., Nariai T. Bayesian Estimation of CBF Measured by DSC-MRI in Patients with Moyamoya Disease: Comparison with O-15-Gas PET and Singular Value Decomposition. **American Journal of Neuroradiology** 40, 1894-900 (2019) DOI:10.3174/ajnr.A6248
71. Hashida Y., Takechi K., Abiru T., Yabe N., Nagase H., Hattori K., Takio S., Sato Y., Hasebe M., Tsukaya H., Takano H. Two ANGUSTIFOLIA genes regulate gametophore and sporophyte development in *Physcomitrella patens*. **Plant Journal** (2019) DOI:10.1111/tpj.14592
72. Hoshikawa E., Sato T., Kimori Y., Suzuki A., Haga K., Kato H., Tabeta K., Nanba D., Izumi K. Noninvasive measurement of cell/colony motion using image analysis methods to evaluate the proliferative capacity of oral keratinocytes as a tool for quality control in regenerative medicine. **Journal of Tissue Engineering** 10, 12 (2019) DOI:10.1177/2041731419881528
73. Hagiwara A., Kamagata K., Shimoji K., Yokoyama K., Andica C., Hori M., Fujita S., Maekawa T., Irie R., Akashi T., Wada A., Suzuki M., Abe O., Hattori N., Aoki S. White Matter Abnormalities in Multiple Sclerosis Evaluated by Quantitative Synthetic MRI, Diffusion Tensor Imaging, and Neurite Orientation Dispersion and Density Imaging. **American Journal of Neuroradiology** 40, 1642-8 (2019) DOI:10.3174/ajnr.A6209
74. Andica C., Hagiwara A., Hori M., Haruyama T., Fujita S., Maekawa T., Kamagata K., Yoshida M.T., Suzuki M., Sugano H., Arai H., Aoki S. Aberrant myelination in patients with Sturge-Weber syndrome analyzed using synthetic quantitative magnetic resonance imaging. **Neuroradiology** 61, 1055-66 (2019) DOI:10.1007/s00234-019-02250-9
75. Ogawa C., Kidokoro H., Fukasawa T., Yamamoto H., Ishihara N., Ito Y., Sakaguchi Y., Okai Y., Ohno A., Nakata T., Azuma Y., Hattori A., Kubota T., Tsuji T., Hirakawa A., Kawai H., Natsume J. Cytotoxic edema at onset in West syndrome of unknown etiology: A longitudinal diffusion tensor imaging study. **Epilepsia** 59, 440-8 (2018) DOI:10.1111/epi.13988
76. Konishi Y., Terai K., Furuta Y., Kiyonari H., Abe T., Ueda Y., Kinashi T., Hamazaki Y., Takaori-Kondo A., Matsuda M. Live-Cell FRET Imaging Reveals a Role of Extracellular Signal-Regulated Kinase Activity Dynamics in Thymocyte Motility. **iScience** 10, 98-113 (2018) DOI:10.1016/j.isci.2018.11.025
77. Katano T., Takao K., Abe M., Yamazaki M., Watanabe M., Miyakawa T., Sakimura K., Ito S. Distribution of Caskin1 protein and phenotypic characterization of its knockout mice using a comprehensive behavioral test battery. **Molecular Brain** 11(2018) DOI:10.1186/s13041-018-0407-2
78. Irie R., Kamagata K., Kerever A., Ueda R., Yokosawa S., Otake Y., Ochi H., Yoshizawa H., Hayashi A., Tagawa K., Okazawa H., Takahashi K., Sato K., Hori M., Arikawa-Hirasawa E., Aoki S. The Relationship between Neurite Density Measured with Confocal Microscopy in a Cleared Mouse Brain and Metrics Obtained from Diffusion Tensor and Diffusion Kurtosis Imaging. **Magnetic Resonance in Medical Sciences** 17, 138-44 (2018) DOI:10.2463/mrms.mp.2017-0031
79. Imanishi A., Murata T., Sato M., Hotta K., Knayoshi I., Matsuda M., Terai K. A Novel Morphological Marker for the Analysis of Molecular Activities at the Single-cell Level. **Cell Structure and Function** 43, 129-40 (2018) DOI:10.1247/csf.18013
80. Hirata A., Hayashi K., Murata K., Nakamura K.I. Removal of choroidal neovascular membrane in a case of macular hole after anti-VEGF therapy for age-related macular degeneration. **American Journal of Ophthalmology Case Reports** 9, 14-7 (2018) DOI:10.1016/j.ajoc.2017.12.003

81. Hashimoto N., Ito Y.M., Okada N., Yamamori H., Yasuda Y., Fujimoto M., Kudo N., Takemura A., Son S., Narita H., Yamamoto M., Tha K.K., Katsuki A., Ohi K., Yamashita F., Koike S., Takahashi T., Nemoto K., Fukunaga M., Onitsuka T., Watanabe Y., Yamasue H., Suzuki M., Kasai K., Kusumi I., Hashimoto R., Cocoro. The effect of duration of illness and antipsychotics on subcortical volumes in schizophrenia: Analysis of 778 subjects. *Neuroimage-Clinical* 17, 563-9 (2018) DOI:10.1016/j.nicl.2017.11.004
82. Goto M., Abe O., Aoki S., Kamagata K., Hori M., Miyati T., Gomi T., Takeda T. Combining Segmented Grey and White Matter Images Improves Voxel-based Morphometry for the Case of Dilated Lateral Ventricles. *Magnetic Resonance in Medical Sciences* 17, 293-300 (2018) DOI:10.2463/mrms.mp.2017-0127
83. Watanabe T., Imamura T., Hiasa Y. Roles of protein kinase R in cancer: Potential as a therapeutic target. *Cancer Science* 109, 919-25 (2018) DOI:10.1111/cas.13551
84. Oti T., Takanami K., Ito S., Ueda T., Matsuda K.I., Kawata M., Soh J., Ukimura O., Sakamoto T., Sakamoto H. Effects of Sex Steroids on the Spinal Gastrin-Releasing Peptide System Controlling Male Sexual Function in Rats. *Endocrinology* 159, 1886-96 (2018) DOI:10.1210/en.2018-00043
85. Kuragano M., Uyeda T.Q.P., Kamijo K., Murakami Y., Takahashi M. Different contributions of nonmuscle myosin IIA and IIB to the organization of stress fiber subtypes in fibroblasts. *Molecular Biology of the Cell* 29, 911-22 (2018) DOI:10.1091/mbc.E17-04-0215
86. Imamura T., Saitou T., Kawakami R. In vivo optical imaging of cancer cell function and tumor microenvironment. *Cancer Science* 109, 912-8 (2018) DOI:10.1111/cas.13544
87. Tsukamoto M., Chiba K., Sobu Y., Shiraki Y., Okumura Y., Hata S., Kitamura A., Nakaya T., Uchida S., Kinjo M., Taru H., Suzuki T. The cytoplasmic region of the amyloid beta-protein precursor (APP) is necessary and sufficient for the enhanced fast velocity of APP transport by kinesin-1. *Febs Letters* 592, 2716-24 (2018) DOI:10.1002/1873-3468.13204
88. Todokoro A., Tanaka S.C., Kawakubo Y., Yahata N., Ishii-Takahashi A., Nishimura Y., Kano Y., Ohtake F., Kasai K. Deficient neural activity subserving decision-making during reward waiting time in intertemporal choice in adult attention-deficit hyperactivity disorder. *Psychiatry and Clinical Neurosciences* 72, 580-90 (2018) DOI:10.1111/pcn.12668
89. Sugimoto K., Kakeda S., Watanabe K., Katsuki A., Ueda I., Igata N., Igata R., Abe O., Yoshimura R., Korogi Y. Relationship between white matter integrity and serum inflammatory cytokine levels in drug-naïve patients with major depressive disorder: diffusion tensor imaging study using tract-based spatial statistics. *Translational Psychiatry* 8(2018) DOI:10.1038/s41398-018-0174-y
90. Saeki A., Sugiyama M., Hasebe A., Suzuki T., Shibata K. Activation of NLRP3 inflammasome in macrophages by mycoplasmal lipoproteins and lipopeptides. *Molecular Oral Microbiology* 33, 300-11 (2018) DOI:10.1111/omi.12225
91. Ishikawa T., Eto K., Kim S.K., Wake H., Takeda I., Horiuchi H., Moorhouse A.J., Ishibashi H., Nabekura J. Cortical astrocytes prime the induction of spine plasticity and mirror image pain. *Pain* 159, 1592-606 (2018) DOI:10.1097/j.pain.0000000000001248
92. Grzybowski M., Taki M., Senda K., Sato Y., Ariyoshi T., Okada Y., Kawakami R., Imamura T., Yamaguchi S. A Highly Photostable Near-Infrared Labeling Agent Based on a Phosphorhodamine for Long-Term and Deep Imaging. *Angewandte Chemie-International Edition* 57, 10137-41 (2018) DOI:10.1002/anie.201804731
93. Takahashi T., Mori T., Ueda K., Yamada P., Nagahara S., Higashiyama T., Sawada H., Igawa T. The male gamete membrane protein DMP9/DAU2 is required for double fertilization in flowering plants. *Development* 145(2018) DOI:10.1242/dev.170076

94. Saitou T., Takanezawa S., Ninomiya H., Watanabe T., Yamamoto S., Hiasa Y., Imamura T. Tissue Intrinsic Fluorescence Spectra-Based Digital Pathology of Liver Fibrosis by Marker-Controlled Segmentation. *Frontiers in Medicine* 5(2018) DOI:10.3389/fmed.2018.00350
95. Koshiyama D., Fukunaga M., Okada N., Morita K., Nemoto K., Yamashita F., Yamamori H., Yasuda Y., Fujimoto M., Kelly S., Jahanshad N., Kudo N., Azechi H., Watanabe Y., Donohoe G., Thompson P.M., Kasai K., Hashimoto R. Role of frontal white matter and corpus callosum on social function in schizophrenia. *Schizophrenia Research* 202, 180-7 (2018) DOI:10.1016/j.schres.2018.07.009
96. Kaneko N., Herranz-Perez V., Otsuka T., Sano H., Ohno N., Omata T., Nguyen H.B., Thai T.Q., Nambu A., Kawaguchi Y., Garcia-Verdugo J.M., Sawamoto K. New neurons use Slit-Robo signaling to migrate through the glial meshwork and approach a lesion for functional regeneration. *Science Advances* 4(2018) DOI:10.1126/sciadv.aav0618
97. Ishiyama S., Shibata Y., Ayuzawa S., Matsushita A., Matsumura A. Clinical Effect of C2 Peripheral Nerve Field Stimulation Using Electroacupuncture for Primary Headache. *Neuromodulation* 21, 793-6 (2018) DOI:10.1111/ner.12772
98. Hayashi Y., Jinnou H., Sawamoto K., Hitoshi S. Adult neurogenesis and its role in brain injury and psychiatric diseases. *Journal of Neurochemistry* 147, 584-94 (2018) DOI:10.1111/jnc.14557
99. Hara S., Hori M., Inaji M., Maehara T., Aoki S., Nariai T. Regression of White Matter Hyperintensity after Indirect Bypass Surgery in a Patient with Moyamoya Disease. *Magnetic Resonance in Medical Sciences* (2018) DOI:10.2463/mrms.ci.2018-0088
100. Tanoue R., Ohta K., Miyazono Y., Iwanaga J., Koba A., Natori T., Iwamoto O., Nakamura K.I., Kusakawa J. Three-dimensional ultrastructural analysis of the interface between an implanted demineralised dentin matrix and the surrounding newly formed bone. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-21291-3
101. Sawada M., Ohno N., Kawaguchi M., Huang S.H., Hikita T., Sakurai Y., Nguyen H.B., Thai T.Q., Ishido Y., Yoshida Y., Nakagawa H., Uemura A., Sawamoto K. PlexinD1 signaling controls morphological changes and migration termination in newborn neurons. *Embo Journal* 37(2018) DOI:10.15252/embj.201797404
102. Saitou T., Kiyomatsu H., Imamura T. Quantitative Morphometry for Osteochondral Tissues Using Second Harmonic Generation Microscopy and Image Texture Information. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-21005-9
103. Nakamura A., Tasaki T., Okuni Y., Song C.H., Murata K., Kozai T., Hara M., Sugimoto H., Suzuki K., Watanabe T., Uchihashi T., Noji H., Iino R. Rate constants, processivity, and productive binding ratio of chitinase A revealed by single-molecule analysis. *Physical Chemistry Chemical Physics* 20, 3010-8 (2018) DOI:10.1039/c7cp04606e
104. Ishii Y., Maruyama S., Fujimura-Kamada K., Kutsuna N., Takahashi S., Kawata M., Minagawa J. Isolation of uracil auxotroph mutants of coral symbiont alga for symbiosis studies. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-21499-3
105. Ohta Y., Furuta T., Nagai T., Horikawa K. Red fluorescent cAMP indicator with increased affinity and expanded dynamic range. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-20251-1
106. Ogasawara H., Grzybowski M., Hosokawa R., Sato Y., Taki M., Yamaguchi S. A far-red fluorescent probe based on a phospha-fluorescein scaffold for cytosolic calcium imaging. *Chemical Communications* 54, 299-302 (2018) DOI:10.1039/c7cc07344e
107. Koshiyama D., Fukunaga M., Okada N., Yamashita F., Yamamori H., Yasuda Y., Fujimoto M., Ohi K., Fujino H., Watanabe Y., Kasai K., Hashimoto R. Subcortical association with memory performance in schizophrenia: a structural magnetic resonance imaging study. *Translational Psychiatry* 8(2018) DOI:10.1038/s41398-017-0069-3

108. Koshiyama D., Fukunaga M., Okada N., Yamashita F., Yamamori H., Yasuda Y., Fujimoto M., Ohi K., Fujino H., Watanabe Y., Kasai K., Hashimoto R. Role of subcortical structures on cognitive and social function in schizophrenia. **Scientific Reports** 8(2018) DOI:10.1038/s41598-017-18950-2
109. Kimura Y., Tasaka M., Torii K.U., Uchida N. ERECTA-family genes coordinate stem cell functions between the epidermal and internal layers of the shoot apical meristem. **Development** 145(2018) DOI:10.1242/dev.156380
110. Hirata A., Murata K., Hayashi K., Nakamura K. Three-Dimensional Analysis of Peeled Internal Limiting Membrane Using Focused Ion Beam/Scanning Electron Microscopy. **Translational Vision Science & Technology** 7(2018) DOI:10.1167/tvst.7.1.15
111. Fujimoto T., Kuwahara T., Eguchi T., Sakurai M., Komori T., Iwatsubo T. Parkinson's disease-associated mutant LRRK2 phosphorylates Rab7L1 and modifies trans-Golgi morphology. **Biochemical and Biophysical Research Communications** 495, 1708-15 (2018) DOI:10.1016/j.bbrc.2017.12.024
112. Goto M., Yamashita F., Kawaguchi A., Abe O., Aoki S., Miyati T., Gomi T., Takeda T., Japanese Alzheimer's Dis N. The Effect of Single-Scan and Scan-Pair Intensity Inhomogeneity Correction Methods on Repeatability of Voxel-Based Morphometry With Multiple Magnetic Resonance Scanners. **Journal of Computer Assisted Tomography** 42, 111-6 (2018) DOI:10.1097/rct.0000000000000657
113. Watanabe T., Song C.H., Murata K., Kureha T., Suzuki D. Seeded Emulsion Polymerization of Styrene in the Presence of Water-Swollen Hydrogel Microspheres. **Langmuir** 34, 8571-80 (2018) DOI:10.1021/acs.langmuir.8b01047
114. Kikuchi K., Nakamura A., Arata M., Shi D.B., Nakagawa M., Tanaka T., Uemura T., Fujimori T., Kikuchi A., Uezu A., Sakamoto Y., Nakanishi H. Map7/7D1 and Dvl form a feedback loop that facilitates microtubule remodeling and Wnt5a signaling. **Embo Reports** 19(2018) DOI:10.15252/embr.201745471
115. Kamiya K., Okada N., Sawada K., Watanabe Y., Irie R., Hanaoka S., Suzuki Y., Koike S., Mori H., Kunimatsu A., Hori M., Aoki S., Kasai K., Abe O. Diffusional kurtosis imaging and white matter microstructure modeling in a clinical study of major depressive disorder. **Nmr in Biomedicine** 31(2018) DOI:10.1002/nbm.3938
116. Kakeda S., Watanabe K., Katsuki A., Sugimoto K., Igata N., Ueda I., Igata R., Abe O., Yoshimura R., Korogi Y. Relationship between interleukin (IL)-6 and brain morphology in drug-naïve, first-episode major depressive disorder using surface-based morphometry. **Scientific Reports** 8(2018) DOI:10.1038/s41598-018-28300-5
117. Hirota K., Yasoda A., Kanai Y., Ueda Y., Yamauchi I., Yamashita T., Sakane Y., Fujii T., Inagaki N. Live imaging analysis of the growth plate in a murine long bone explanted culture system. **Scientific Reports** 8(2018) DOI:10.1038/s41598-018-28742-x
118. Hagiwara A., Hori M., Kamagata K., Warntjes M., Matsuyoshi D., Nakazawa M., Ueda R., Andica C., Koshino S., Maekawa T., Irie R., Takamura T., Kumamaru K.K., Abe O., Aoki S. Myelin Measurement: Comparison Between Simultaneous Tissue Relaxometry, Magnetization Transfer Saturation Index, and T(1)w/T(2)w Ratio Methods. **Scientific Reports** 8(2018) DOI:10.1038/s41598-018-28852-6
119. Otomo K., Hibi T., Fang Y.C., Hung J.H., Tsutsumi M., Kawakami R., Yokoyama H., Nemoto T. Advanced easy STED microscopy based on two-photon excitation by electrical modulations of light pulse wavefronts. **Biomedical Optics Express** 9, 2671-80 (2018) DOI:10.1364/boe.9.002671

120. Muta Y., Fujita Y., Sumiyama K., Sakurai A., Taketo M.M., Chiba T., Seno H., Aoki K., Matsuda M., Imajo M. Composite regulation of ERK activity dynamics underlying tumour-specific traits in the intestine. *Nature Communications* 9(2018) DOI:10.1038/s41467-018-04527-8
121. Komatsu N., Terai K., Imanishi A., Kamioka Y., Sumiyama K., Jin T., Okada Y., Nagai T., Matsuda M. A platform of BRET-FRET hybrid biosensors for optogenetics, chemical screening, and in vivo imaging. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-27174-x
122. Inaba K., Shiba K. Microscopic analysis of sperm movement: links to mechanisms and protein components. *Microscopy* 67, 144-55 (2018) DOI:10.1093/jmicro/dfy021
123. Lin H.A., Sato Y., Segawa Y., Nishihara T., Sugimoto N., Scott L.T., Higashiyama T., Itami K. A Water-Soluble Warped Nanographene: Synthesis and Applications for Photoinduced Cell Death. *Angewandte Chemie-International Edition* 57, 2874-8 (2018) DOI:10.1002/anie.201713387
124. Kuragano M., Murakami Y., Takahashi M. Nonmuscle myosin IIA and IIB differentially contribute to intrinsic and directed migration of human embryonic lung fibroblasts. *Biochemical and Biophysical Research Communications* 498, 25-31 (2018) DOI:10.1016/j.bbrc.2018.02.171
125. Hori M., Hagiwara A., Fukunaga I., Ueda R., Kamiya K., Suzuki Y., Liu W., Murata K., Takamura T., Hamasaki N., Irie R., Kamagata K., Kumamaru K.K., Suzuki M., Aoki S. Application of Quantitative Microstructural MR Imaging with Atlas-based Analysis for the Spinal Cord in Cervical Spondylotic Myelopathy. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-23527-8
126. Goto M., Kamagata K., Hatano T., Hattori N., Abe O., Aoki S., Hori M., Gomi T. Depressive symptoms in Parkinson's disease are related to decreased left hippocampal volume: correlation with the 15-item shortened version of the Geriatric Depression Scale. *Acta Radiologica* 59, 341-5 (2018) DOI:10.1177/0284185117719100
127. Tanaka K., Takeda S., Mitsuoka K., Oda T., Kimura-Sakiyama C., Maeda Y., Narita A. Structural basis for cofilin binding and actin filament disassembly. *Nature Communications* 9(2018) DOI:10.1038/s41467-018-04290-w
128. Matsuyama S., Kage Y., Fujimoto N., Ushijima T., Tsuruda T., Kitamura K., Shiose A., Asada Y., Sumimoto H., Takeya R. Interaction between cardiac myosin-binding protein C and formin Fhod3. *Proceedings of the National Academy of Sciences of the United States of America* 115, E4386-E95 (2018) DOI:10.1073/pnas.1716498115
129. Kuno M., Hirano Y., Nakagawa A., Asano K., Oshima F., Nagaoka S., Matsumoto K., Masuda Y., Iyo M., Shimizu E. White Matter Features Associated With Autistic Traits in Obsessive-Compulsive Disorder. *Frontiers in Psychiatry* 9(2018) DOI:10.3389/fpsy.2018.00216
130. Fujikake K., Sawada M., Hikita T., Seto Y., Kaneko N., Herranz-Perez V., Dohi N., Homma N., Osaga S., Yanagawa Y., Akaike T., Garcia-Verdugo J.M., Hattori M., Sobue K., Sawamoto K. Detachment of Chain-Forming Neuroblasts by Fyn-Mediated Control of cell-cell Adhesion in the Postnatal Brain. *Journal of Neuroscience* 38, 4598-609 (2018) DOI:10.1523/jneurosci.1960-17.2018
131. Andica C., Hagiwara A., Hori M., Nakazawa M., Goto M., Koshino S., Kamagata K., Kumamaru K.K., Aoki S. Automated brain tissue and myelin volumetry based on quantitative MR imaging with various in-plane resolutions. *Journal of Neuroradiology* 45, 164-8 (2018) DOI:10.1016/j.neurad.2017.10.002

132. Takeda A., Shinozaki Y., Kashiwagi K., Ohno N., Eto K., Wake H., Nabekura J., Koizumi S. Microglia mediate non-cell-autonomous cell death of retinal ganglion cells. *Glia* 66, 2366-84 (2018) DOI:10.1002/glia.23475
133. Sano T., Kobayashi T., Ogawa O., Matsuda M. Gliding Basal Cell Migration of the Urothelium during Wound Healing. *American Journal of Pathology* 188, 2564-73 (2018) DOI:10.1016/j.ajpath.2018.07.010
134. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Kasai K. Abnormal asymmetries in subcortical brain volume in early adolescents with subclinical psychotic experiences. *Translational Psychiatry* 8(2018) DOI:10.1038/s41398-018-0312-6
135. Ida-Yonemochi H., Morita W., Sugiura N., Kawakami R., Morioka Y., Takeuchi Y., Sato T., Shibata S., Watanabe H., Imamura T., Igarashi M., Ohshima H., Takeuchi K. Craniofacial abnormality with skeletal dysplasia in mice lacking chondroitin sulfate N-acetylgalactosaminyltransferase-1. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-35412-5
136. Hirano T., Konno H., Takeda S., Dolan L., Kato M., Aoyama T., Higaki T., Takigawa-Imamura H., Sato M.H. PtdIns(3,5)P-2 mediates root hair shank hardening in Arabidopsis. *Nature Plants* 4, 888-+ (2018) DOI:10.1038/s41477-018-0277-8
137. Abe T., Kutsuna N., Kiyonari H., Furuta Y., Fujimori T. ROSA26 reporter mouse lines and image analyses reveal distinct region-specific cell behaviors in the visceral endoderm. *Development* 145(2018) DOI:10.1242/dev.165852
138. Tsunoda J., Song C.H., Imai F.L., Takagi J., Ueno H., Murata T., Iino R., Murata K. Off-axis rotor in *Enterococcus hirae* V-ATPase visualized by Zernike phase plate single-particle cryo-electron microscopy. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-33977-9
139. Hara S., Hori M., Murata S., Ueda R., Tanaka Y., Inaji M., Maehara T., Aoki S., Nariai T. Microstructural Damage in Normal-Appearing Brain Parenchyma and Neurocognitive Dysfunction in Adult Moyamoya Disease. *Stroke* 49, 2504-7 (2018) DOI:10.1161/strokeaha.118.022367
140. Ageta-Ishihara N., Konno K., Yamazaki M., Abe M., Sakimura K., Watanabe M., Kinoshita M. CDC42EP4, a perisynaptic scaffold protein in Bergmann glia, is required for glutamatergic tripartite synapse configuration. *Neurochemistry International* 119, 190-8 (2018) DOI:10.1016/j.neuint.2018.01.003
141. Miyatake Y., Kuribayashi-Shigetomi K., Ohta Y., Ikeshita S., Subagyo A., Sueoka K., Kakugo A., Amano M., Takahashi T., Okajima T., Kasahara M. Visualising the dynamics of live pancreatic microtumours self-organised through cell-in-cell invasion. *Scientific Reports* 8(2018) DOI:10.1038/s41598-018-32122-w
142. Kakegawa W., Katoh A., Narumi S., Miura E., Motohashi J., Takahashi A., Kohda K., Fukazawa Y., Yuzaki M., Matsuda S. Optogenetic Control of Synaptic AMPA Receptor Endocytosis Reveals Roles of LTD in Motor Learning. *Neuron* 99, 985-+ (2018) DOI:10.1016/j.neuron.2018.07.034
143. Eguchi T., Kuwahara T., Sakurai M., Komori T., Fujimoto T., Ito G., Yoshimura S., Harada A., Fukuda M., Koike M., Iwatsubo T. LRRK2 and its substrate Rab GTPases are sequentially targeted onto stressed lysosomes and maintain their homeostasis. *Proceedings of the National Academy of Sciences of the United States of America* 115, E9115-E24 (2018) DOI:10.1073/pnas.1812196115

144. Ageta H., Ageta-Ishihara N., Hitachi K., Karayel O., Onouchi T., Yamaguchi H., Kahyo T., Hatanaka K., Ikegami K., Yoshioka Y., Nakamura K., Kosaka N., Nakatani M., Uezumi A., Ide T., Tsutsumi Y., Sugimura H., Kinoshita M., Ochiya T., Mann M., Setou M., Tsuchida K. UBL3 modification influences protein sorting to small extracellular vesicles. **Nature Communications** 9(2018) DOI:10.1038/s41467-018-06197-y
145. Tanaka H., Okazaki T., Yokota M., Koike M., Okada Y., Fujiki Y., Gotoh Y. Peroxisomes control mitochondrial dynamics and the mitochondrion-dependent pathway of apoptosis. **bioRxiv**, 407098 (2018) DOI:10.1101/407098
146. Yamaguchi S., Fukazawa A., Taki M. Phosphole P-oxide-containing ϕ -electron materials: Synthesis and applications in fluorescence imaging. **Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry** 75, 1179-87 (2017) DOI:10.5059/yukigoseikyokaishi.75.1179
147. Tsuchiyagaito A., Hirano Y., Asano K., Oshima F., Nagaoka S., Takebayashi Y., Matsumoto K., Masuda Y., Iyo M., Shimizu E., Nakagawa A. Cognitive-behavioral therapy for obsessive-compulsive disorder with and without autism spectrum disorder: Gray matter differences associated with poor outcome. **Frontiers in Psychiatry** 8(2017) DOI:10.3389/fpsyt.2017.00143
148. Takeda K., Matsumoto M., Ogata Y., Maida K., Murakami H., Murayama K., Shimoji K., Hanakawa T., Matsumoto K., Nakagome K. Impaired prefrontal activity to regulate the intrinsic motivation-action link in schizophrenia. **Neuroimage-Clinical** 16, 32-42 (2017) DOI:10.1016/j.nicl.2017.07.003
149. Kawaoka T., Ohnuki S., Ohya Y., Suzuki K. Morphometric analysis of autophagy-related structures in *Saccharomyces cerevisiae*. **Autophagy** 13, 2104-10 (2017) DOI:10.1080/15548627.2017.1384888
150. Hori M., Kamiya K., Irie R. Advanced diffusion-weighted magnetic resonance imaging in the evaluation of white matter axons in patients with idiopathic normal pressure hydrocephalus. **Neural Regeneration Research** 12, 1974-5 (2017) DOI:10.4103/1673-5374.221149
151. Hagiwara A., Hori M., Yokoyama K., Takemura M.Y., Andica C., Kumamaru K.K., Nakazawa M., Takano N., Kawasaki H., Sato S., Hamasaki N., Kunimatsu A., Aoki S. Utility of a multiparametric quantitative MRI model that assesses myelin and edema for evaluating plaques, periplaque white matter, and normal-appearing white matter in patients with multiple sclerosis: A feasibility study. **American Journal of Neuroradiology** 38, 237-42 (2017) DOI:10.3174/ajnr.A4977
152. Goto M., Abe O., Miyati T., Aoki S., Gomi T., Takeda T. Mis-segmentation in voxel-based morphometry due to a signal intensity change in the putamen. **Radiological Physics and Technology** 10, 515-24 (2017) DOI:10.1007/s12194-017-0424-3
153. Abe H., Shimoji K., Nagamine Y., Fujiwara S., Izumi S.I. Predictors of Recovery from Traumatic Brain Injury-Induced Prolonged Consciousness Disorder. **Neural Plasticity** (2017) DOI:10.1155/2017/9358092
154. Abe H., Keigo S., Takeo K., Takanori K., Yoshihide N., Satoru F., Yutaka O., Shin-Ichi I. Longitudinal White Matter Alteration in Prolonged Disorders of Consciousness due to Traffic Accidents. **International Journal of Neurology and Neurotherapy** 4(2017) DOI:10.23937/2378-3001/1410064
155. Sato K., Kerever A., Kamagata K., Tsuruta K., Irie R., Tagawa K., Okazawa H., Arikawa-Hirasawa E., Nitta N., Aoki I., Aoki S. Understanding microstructure of the brain by comparison of neurite orientation dispersion and density imaging (NODDI) with transparent mouse brain. **Acta Radiol Open** 6, 2058460117703816 (2017) DOI:10.1177/2058460117703816

156. Kimura K., Mamane A., Sasaki T., Sato K., Takagi J., Niwayama R., Hufnagel L., Shimamoto Y., Joanny J.F., Uchida S., Kimura A. Endoplasmic-reticulum-mediated microtubule alignment governs cytoplasmic streaming. *Nature Cell Biology* 19, 399-+ (2017) DOI:10.1038/ncb3490
157. Andica C., Hagiwara A., Nakazawa M., Kumamaru K.K., Hori M., Ikeno M., Shimizu T., Aoki S. Synthetic MR Imaging in the Diagnosis of Bacterial Meningitis. *Magnetic Resonance in Medical Sciences* 16, 91-2 (2017) DOI:10.2463/mrms.ci.2016-0082
158. Wang C.G., Taki M., Sato Y., Fukazawa A., Higashiyama T., Yamaguchi S. Super-Photostable Phosphole-Based Dye for Multiple-Acquisition Stimulated Emission Depletion Imaging. *Journal of the American Chemical Society* 139, 10374-81 (2017) DOI:10.1021/jacs.7b04418
159. Takano N., Suzuki M., Irie R., Yamamoto M., Teranishi K., Yatomi K., Hamasaki N., Kumamaru K.K., Hori M., Oishi H., Aoki S. Non-Contrast-Enhanced Silent Scan MR Angiography of Intracranial Anterior Circulation Aneurysms Treated with a Low-Profile Visualized Intraluminal Support Device. *American Journal of Neuroradiology* 38, 1610-6 (2017) DOI:10.3174/ajnr.A5223
160. Sobu Y., Furukori K., Chiba K., Nairn A.C., Kinjo M., Hata S., Suzuki T. Phosphorylation of multiple sites within an acidic region of Alcadein alpha is required for kinesin-1 association and Golgi exit of Alcadein alpha cargo. *Molecular Biology of the Cell* 28, 3844-56 (2017) DOI:10.1091/mbc.E17-05-0301
161. Nakao A., Miyazaki N., Ohira K., Hagihara H., Takagi T., Usuda N., Ishii S., Murata K., Miyakawa T. Immature morphological properties in subcellular-scale structures in the dentate gyrus of Schnurri-2 knockout mice: a model for schizophrenia and intellectual disability. *Molecular Brain* 10(2017) DOI:10.1186/s13041-017-0339-2
162. Koike S., Satomura Y., Kawasaki S., Nishimura Y., Kinoshita A., Sakurada H., Yamagishi M., Ichikawa E., Matsuoka J., Okada N., Takizawa R., Kasai K. Application of functional near infrared spectroscopy as supplementary examination for diagnosis of clinical stages of psychosis spectrum. *Psychiatry and Clinical Neurosciences* 71, 794-806 (2017) DOI:10.1111/pcn.12551
163. Hori M., Irie R., Suzuki M., Aoki S. Teaching Neuroimages: Obscured Cerebral Infarction on MRI. *Clin Neuroradiol* 27, 519-20 (2017) DOI:10.1007/s00062-017-0576-x
164. Chiba K., Chien K.Y., Sobu Y., Hata S., Kato S., Nakaya T., Okada Y., Nairn A.C., Kinjo M., Taru H., Wang R., Suzuki T. Phosphorylation of KLC1 modifies interaction with JIP1 and abolishes the enhanced fast velocity of APP transport by kinesin-1. *Molecular Biology of the Cell* 28, 3857-69 (2017) DOI:10.1091/mbc.E17-05-0303
165. Uno K., Sasaki T., Sugimoto N., Ito H., Nishihara T., Hagihara S., Higashiyama T., Sasaki N., Sato Y., Itami K. Key Structural Elements of Unsymmetrical Cyanine Dyes for Highly Sensitive Fluorescence Turn-On DNA Probes. *Chemistry-an Asian Journal* 12, 233-8 (2017) DOI:10.1002/asia.201601430
166. Mizuno Y., Jung M., Fujisawa T.X., Takiguchi S., Shimada K., Saito D.N., Kosaka H., Tomoda A. Catechol-O-methyltransferase polymorphism is associated with the cortico-cerebellar functional connectivity of executive function in children with attention-deficit/hyperactivity disorder. *Scientific Reports* 7(2017) DOI:10.1038/s41598-017-04579-8
167. Katoh M., Wu B., Nguyen H.B., Thai T.Q., Yamasaki R., Lu H.Y., Rietsch A.M., Zorlu M.M., Shinozaki Y., Saitoh Y., Saitoh S., Sakoh T., Ikenaka K., Koizumi S., Ransohoff R.M., Ohno N. Polymorphic regulation of mitochondrial fission and fusion modifies phenotypes of microglia in neuroinflammation. *Scientific Reports* 7(2017) DOI:10.1038/s41598-017-05232-0

168. Morizawa Y.M., Hirayama Y., Ohno N., Shibata S., Shigetomi E., Sui Y., Nabekura J., Sato K., Okajima F., Takebayashi H., Okano H., Koizumi S. Reactive astrocytes function as phagocytes after brain ischemia via ABCA1-mediated pathway. *Nature Communications* 8(2017) DOI:10.1038/s41467-017-00037-1
169. Kotani R., Sotome H., Okajima H., Yokoyama S., Nakaike Y., Kashiwagi A., Mori C., Nakada Y., Yamaguchi S., Osuka A., Sakamoto A., Miyasaka H., Saito S. Flapping viscosity probe that shows polarity-independent ratiometric fluorescence. *Journal of Materials Chemistry C* 5, 5248-56 (2017) DOI:10.1039/c7tc01533j
170. Kaneko N., Sawada M., Sawamoto K. Mechanisms of neuronal migration in the adult brain. *Journal of Neurochemistry* 141, 835-47 (2017) DOI:10.1111/jnc.14002
171. Arai R., Sugawara T., Sato Y., Minakuchi Y., Toyoda A., Nabeshima K., Kimura H., Kimura A. Reduction in chromosome mobility accompanies nuclear organization during early embryogenesis in *Caenorhabditis elegans*. *Scientific Reports* 7(2017) DOI:10.1038/s41598-017-03483-5
172. Takano N., Suzuki M., Irie R., Yamamoto M., Hamasaki N., Kamagata K., Kumamaru K.K., Hori M., Oishi H., Aoki S. Usefulness of Non-Contrast-Enhanced MR Angiography Using a Silent Scan for Follow-Up after Y-Configuration Stent-Assisted Coil Embolization for Basilar Tip Aneurysms. *American Journal of Neuroradiology* 38, 577-81 (2017) DOI:10.3174/ajnr.A5033
173. Ikematsu S., Tasaka M., Torii K.U., Uchida N. ERECTA-family receptor kinase genes redundantly prevent premature progression of secondary growth in the *Arabidopsis* hypocotyl. *New Phytologist* 213, 1697-709 (2017) DOI:10.1111/nph.14335
174. Tsuiji H., Inoue I., Takeuchi M., Furuya A., Yamakage Y., Watanabe S., Koike M., Hattori M., Yamanaka K. TDP-43 accelerates age-dependent degeneration of interneurons. *Scientific Reports* 7(2017) DOI:10.1038/s41598-017-14966-w
175. Sasabayashi D., Takayanagi Y., Takahashi T., Koike S., Yamasue H., Katagiri N., Sakuma A., Obara C., Nakamura M., Furuichi A., Kido M., Nishikawa Y., Noguchi K., Matsumoto K., Mizuno M., Kasai K., Suzuki M. Increased Occipital Gyrification and Development of Psychotic Disorders in Individuals With an At-Risk Mental State: A Multicenter Study. *Biological Psychiatry* 82, 737-45 (2017) DOI:10.1016/j.biopsych.2017.05.018
176. Konagaya Y., Teraï K., Hirao Y., Takakura K., Imajo M., Kamioka Y., Sasaoka N., Kakizuka A., Sumiyama K., Asano T., Matsuda M. A Highly Sensitive FRET Biosensor for AMPK Exhibits Heterogeneous AMPK Responses among Cells and Organs. *Cell Reports* 21, 2628-38 (2017) DOI:10.1016/j.celrep.2017.10.113
177. Shinozaki Y., Kashiwagi K., Namekata K., Takeda A., Ohno N., Robaye B., Harada T., Iwata T., Koizumi S. Purinergic dysregulation causes hypertensive glaucoma-like optic neuropathy. *Jci Insight* 2(2017) DOI:10.1172/jci.insight.93456
178. Hagiwara A., Warntjes M., Hori M., Andica C., Nakazawa M., Kumamaru K.K., Abe O., Aoki S. SyMRI of the Brain Rapid Quantification of Relaxation Rates and Proton Density, With Synthetic MRI, Automatic Brain Segmentation, and Myelin Measurement. *Investigative Radiology* 52, 647-57 (2017) DOI:10.1097/rli.0000000000000365
179. Hagiwara A., Hori M., Yokoyama K., Nakazawa M., Ueda R., Horita M., Andica C., Abe O., Aoki S. Analysis of White Matter Damage in Patients with Multiple Sclerosis via a Novel In Vivo MR Method for Measuring Myelin, Axons, and G-Ratio. *American Journal of Neuroradiology* 38, 1934-40 (2017) DOI:10.3174/ajnr.A5312
180. Satoh T., Song C., Zhu T., Toshimori T., Murata K., Hayashi Y., Kamikubo H., Uchihashi T., Kato K. Visualisation of a flexible modular structure of the ER folding-sensor enzyme UGGT. *Scientific Reports* 7(2017) DOI:10.1038/s41598-017-12283-w

181. Tsuboyama K., Koyama-Honda I., Sakamaki Y., Koike M., Morishita H., Mizushima N. The ATG conjugation systems are important for degradation of the inner autophagosomal membrane. *Science* 354, 1036-41 (2016) DOI:10.1126/science.aaf6136
182. Sakakibara E., Homae F., Kawasaki S., Nishimura Y., Takizawa R., Koike S., Kinoshita A., Sakurada H., Yamagishi M., Nishimura F., Yoshikawa A., Inai A., Nishioka M., Eriguchi Y., Matsuoka J., Satomura Y., Okada N., Kakiuchi C., Araki T., Kan C., Umeda M., Shimazu A., Uga M., Dan I., Hashimoto H., Kawakami N., Kasai K. Detection of resting state functional connectivity using partial correlation analysis: A study using multi-distance and whole-head probe near-infrared spectroscopy. *Neuroimage* 142, 590-601 (2016) DOI:10.1016/j.neuroimage.2016.08.011