PATENTS

Biomedical imaging

Recent patents related to systems and methods of imaging.

Patent number	Description	Assignee	Inventor	Date
US 10,614,993	Methods and apparatus for an imaging system comprising a multitude of chemical-emitting elements upon a substrate. In some embodiments the substrate may be approximately round with a radius of approximately one inch. Various methods relating to using and producing an imaging system of chemical emitters are disclosed.	Flitsch FA	Flitsch FA	4/7/2020
US 10,473,644	A system for assaying forces applied by cells, including an optically transparent substrate comprising a soft material having a Young's modulus within the range of about 3 kPa to about 100 kPa. An array of molecular patterns is disposed on a surface of the optically transparent substrate, and the molecular patterns include fluorophore-conjugated patterns adherent to cells. The system includes at least one light source configured to excite the fluorophore-conjugated patterns and an imaging device configured to capture fluorescence emitted from the fluorophore-conjugated patterns. Dimensional changes in the size of the patterns are used to determine contractile forces imparted by cells located on the patterns.	The Regents of the University of California (Oakland, CA, USA)	Di Carlo D, Tseng P, Pushkarsky I	11/12/2019
US 10,430,955	Systems and methods for high-content screening for microscope imaging. In some embodiments, the system comprises a microscope and a processor configured to implement a slide loader module, a reference imager module, a slide imager module, a region of interest (ROI) finder module, a compare imager module, a calibrator module and an image stitcher module.	The Regents of the University of California (Oakland, CA, USA)	Frise E, Booth B, McParland C, Beattie K, Fisher B, Hammonds AS, Celniker SE	10/1/2019
US 10,376,600	A method for early-stage pathology detection, location, imaging, evaluation and treatment of cells and/or extracellular vesicles in the circulation.	Peyman GA	Peyman GA	8/13/2019
US 10,294,510	Methods and compositions for high-throughput and highly multiplexed imaging with programmable nucleic acid probes.	President and Fellows of Harvard College (Cambridge, MA)	Yin P, Agasti S, Chen X, Jungmann R	5/21/2019
US 10,077,463	Photochemical crosslinkers and photocleavable crosslinkers and their uses in methods for cell selection from cell cultures. The photochemical crosslinkers comprise a fluorescent dye and a radical generator. The photocleavable crosslinkers comprise a photocleavable linker linking two electrophilic groups. Also, systems for imaging cells comprising a plurality of cells crosslinked to extracellular matrix proteins using a crosslinker as described, an imaging apparatus, an illuminating apparatus, and software for image processing.	President and Fellows of Harvard College (Cambridge, MA)	Cohen AE, Chien M-P	9/18/2018

Source: United States Patent and Trademark Office (<http://www.uspto.gov>).

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