Optoacoustic neuroimaging of mice expressing a genetically encoded calcium indicator allows for rapid, high-resolution, whole-brain 3D snapshots of neuronal calcium activity and haemodynamics.

Rapid volumetric optoacoustic imaging of neural dynamics ...
Rapid advances in sensor dynamic range and brightness were especially focused on single-wavelength GECIs, such as GCaMP. However, several design challenges still remain, especially in terms of response kinetics, signal linearity, sensitivity, and multicolor availability, which together currently present a substantial bottleneck to quantitatively understand complex activity dynamics of the ...

Rational Engineering of XCaMPs, a Multicolor GECI Suite ...
Rigid-body dynamics studies the movement of systems of interconnected bodies under the action of external forces. The assumption that the bodies are rigid, which means that they do not deform under the action of applied forces, simplifies the analysis by reducing the parameters that describe the configuration of the system to the translation and rotation of reference frames attached to each body.

Rigid body dynamics - Wikipedia
Glenn L. Martin Wind Tunnel Through the Years. Founded in 1949, the Glenn L. Martin Wind Tunnel is celebrating 70 years of aerodynamic research and development.

A. James Clark School of Engineering, University of Maryland
Since 1954, we have led the way in the design and manufacturing of durable air-cooled heat exchanger. From innovative design and engineering to world-class customer support, you can count on us to deliver on your demands.

Homepage | Harsco
Purpose. The Journal of Dynamic Systems, Measurement, and Control publishes theoretical and applied original papers in the traditional areas implied by its name, as well as papers in interdisciplinary areas.

Journal of Dynamic Systems, Measurement, and Control | ASME DC
Rotor dynamics is a specialized branch of applied mechanics concerned with the behavior and diagnosis of rotating structures. It is commonly used to analyze the behavior of structures ranging from jet engines and steam turbines to auto engines and computer disk storage. At its most basic level, rotor dynamics is concerned with one or more mechanical structures supported by bearings and ...

Rotordynamics - Wikipedia
Revised and significantly expanded, the fifth edition of this classic work offers both new and substantially updated information. As the definitive reference on fire protection engineering, this book provides thorough treatment of the current best practices in fire protection engineering and ...

SFPE Handbook of Fire Protection Engineering | Morgan J ...
Darryll J. Pines has served as dean and the Nariman Farvardin Professor of Aerospace Engineering at the Clark School since January 2009. He first arrived in 1995 as an assistant professor and later served as chair of the Department of Aerospace Engineering from 2006 to 2009.

Meet the Dean | A. James Clark School of Engineering ...
Momentum Engineering Corp. (MEC) is a consulting firm specializing in accident reconstruction, forensic engineering, heavy truck safety, graphics and animation.

Momentum Engineering Corp. Accident Reconstruction, Los ...
One of the best techniques for success in business and in life is intelligent selection of role models. They can serve as sources of wisdom and inspiration, as bright lights illuminating the path to the person you want to become.

What are dynamics? definition and meaning ...
Journal of Coupled Systems and Multiscale Dynamics (JCSMD) is an international, peer-reviewed interdisciplinary journal that provides a unique publication forum for addressing challenges and new emerging problems in the study of coupled systems, their dynamics, as well as associated phenomena and processes.

Journal of Coupled Systems and Multiscale Dynamics
Connect with us! Keep current with the latest ASAPs via ACS Mobile app
and e-alerts, and follow us for updates on conferences, research highlights, and more.

**American Chemical Society - ACS Publications: Chemistry ...**

**Martindale's Calculators On-Line Center Engineering Center Mechanical**

**Engineering Center: A-L (Calculators, Applets, Spreadsheets, and where Applicable includes ...**

**Martindale's Calculators On-Line Center: Mechanical ...**

A cycling peloton is the main group of cyclists riding closely together to reduce aerodynamic drag and energy expenditure. Previous studies on small groups of in-line drafting cyclists showed reductions down to 70 to 50% the drag of an isolated rider at same speed and these values have also been used for pelotons.

**Aerodynamic drag in cycling pelotons: New insights by CFD ...**

PETase Exhibits a Canonical ?/?-Hydrolase Structure with an Open Active-Site Cleft. The high-resolution X-ray crystal structure of the I. sakaiensis PETase was solved employing a newly developed synchrotron beamline capable of long-wavelength X-ray crystallography ().Using single-wavelength anomalous dispersion, phases were obtained from the native sulfur atoms present in the protein.

**Characterization and engineering of a plastic-degrading ...**

A combination of improved near-infrared voltage indicators, high-speed microscopes and targeted gene expression schemes enabled simultaneous in vivo optogenetic control and recording of voltage ...

**Voltage imaging and optogenetics reveal behaviour ...**
