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NVE Stock Watch

NVE's stock (Nasdaq: NVEC) reached several new all-time highs in November.

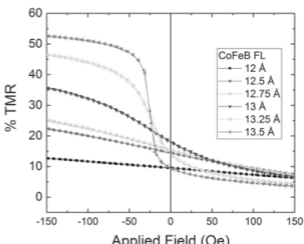
Happy Holidays

NVE will be closed for holidays December 25 and January 1.

NVE's Strong Presence at the MMM Conference



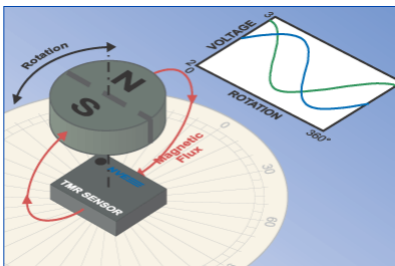
NVE researchers authored two papers, titled "Utilizing superparamagnetic freelayers for magneto-resistive sensors," and "Surface-acoustic-wave-pumped parametric amplification of forward volume spin waves," which were presented at the Annual Conference on Magnetism and Magnetic Materials in November.



Tunneling Magnetoresistance (TMR, %) for various tunnel junction structures.

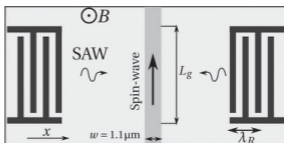
Superparamagnetic freelayers can increase the sensitivity of Tunneling Magnetoresistance (TMR) sensors.

NVE is a leader in TMR sensing, with a full line of [TMR angle and rotation sensors](#):



TMR angle and rotation sensors.

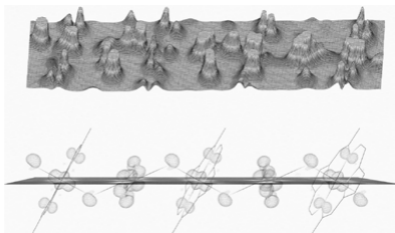
The U.S. Navy recently awarded NVE a development contract related to surface-acoustic-wave-pumped parametric amplification:



SAW parametric pumping.

Potential commercial applications for the technology include 5G cellular infrastructure.

In addition to the papers, an image by NVE Spintronic Device Scientist Dr. Chris Olson was selected for the "Magnetism as Art" exhibit, which highlighted the aesthetic aspects of research output. The image comprises two perspectives on a computational solution, taken from electronic-structure modeling of a Mn[TCNE] metal-organic magnet:



Spatial mixing of Mn- and TCNE-localized spins in 2D projections along a crystal plane (top), and on a crystal lattice (bottom).