



## Nanorelated NTNU publications in 2020

### *List of NTNU Papers related to nanoscience, nanotechnology and functional materials*

Abdul-Razzaq, Rafat; Jaafar, Mohd Zaidi; Bandyopadhyay, Sulalit. Investigating Synergistic Effects of Surfactants and Nanoparticles (NPs) on Emulsion Viscosity. Asian Journal of Fundamental and Applied Sciences 2020 ;Volume 1.(1) p. 9-16

Adnan, Mohammed Mostafa; Tveten, Erlend Grytli; Miranti, Rany; Hvidsten, Sverre; Ese, Marit-Helen Glomm; Glaum, Julia; Einarsrud, Mari-Ann. In situ synthesis of epoxy nanocomposites with hierarchical surface-modified SiO<sub>2</sub> clusters. Journal of Sol-Gel Science and Technology 2020 ;Volume 95. p. 783-794

Afadzi, Mercy; Myhre, Ola Finneng; Yemane, Petros Tesfamichael; Bjørkøy, Astrid; Torp, Sverre Helge; van Wamel, Annemieke; Lelu, Sylvie; Angelsen, Bjørn Atle Johan; Davies, Catharina de Lange. Effect of Acoustic Radiation Force on the Distribution of Nanoparticles in Solid Tumors.. IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control 2020

Alex Mofid, Sohrab; Jelle, Bjørn Petter; Zhao, Xinpeng; Gao, Tao; Grandcolas, Mathieu; Cunningham, Bridget; Ng, Serena; Yang, Ronggui. Utilization of Size-Tunable Hollow Silica Nanospheres for Building Thermal Insulation Applications. Journal of Building Engineering 2020 ;Volume 31. p. 1-9

Ali, Ayaz; Koybasi, Ozhan; Xing, Wen; Wright, Daniel Nilsen; Varandani, Deepak; Taniguchi, Takashi; Watanabe, Kenji; Mehta, Bodh R.; Belle, Branson. Single digit parts-per-billion NO<sub>x</sub> detection using MoS<sub>2</sub>/hBN transistors. Sensors and Actuators A-Physical 2020 ;Volume 315. p. -

Ali, Daniel; Zeiger, Caren; Azim, Muhammad Mohsin; Lein, Hilde Lea; Mathisen, Karina. Evaluation of surfactant templates for one-pot hydrothermal synthesis of hierarchical SAPO-5. Microporous and Mesoporous Materials 2020 p. -

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Alvi, Muhammad Awais Ashfaq; Agonafir, Mesfin Belayneh; Bandyopadhyay, Sulalit; Minde, Mona Wetrhus. Effect of Iron Oxide Nanoparticles on the Properties of Water-Based Drilling Fluids. Energies 2020 ;Volume 13.(24) p. -

Alvi, Muhammad Awais Ashfaq; Agonafir, Mesfin Belayneh; Fjelde, Kjell Kåre; Saasen, Arild; Bandyopadhyay, Sulalit. Effect of Hydrophobic Iron Oxide Nanoparticles on the Properties of Oil-Based Drilling Fluid. Journal of energy resources technology 2020 ;Volume 143.(4) p. -

Amundsen, Morten; Linder, Jacob. Spin accumulation induced by a singlet supercurrent. Physical review B (PRB) 2020 ;Volume 102.(10) p. -

Andersson, Sven Per David; de Wijn, Astrid. Understanding the friction of atomically thin layered materials. Nature Communications 2020 p. -



Aramian, Atefeh; Razavi, Seyed Mohammad Javad; Sadeghian, Zohreh; Berto, Filippo. A review of additive manufacturing of cermets. *Additive Manufacturing* 2020 ;Volume 33:101130. p. 1-17

Aramian, Atefeh; Sadeghian, Zohreh; Prashanth, Konda; Berto, Filippo. In situ fabrication of TiC-NiCr cermets by selective laser melting. *International journal of refractory metals & hard materials* 2020 ;Volume 87. p. 1-8

Aramian, Atefeh; Sadeghian, Zohreh; Razavi, Seyed Mohammad Javad; Prashanth, Konda Gokuldoss; Berto, Filippo. Effect of selective laser melting process parameters on microstructural and mechanical properties of TiC-NiCr cermet. *Ceramics International* 2020 ;Volume 46.(18) p. 28749-28757

Arnfinnsdottir, Nina Bjørk; Chapman, Cole A; Bailey, Ryan C; Aksnes, Astrid; Stokke, Bjørn Torger. Impact of Silanization Parameters and Antibody Immobilization Strategy on Binding Capacity of Photonic Ring Resonators. *Sensors* 2020 ;Volume 20.(11)

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Badugu, Ramachandram; Mao, Jieying; Zhang, Douguo; Descrovi, Emiliano; Lakowicz, Joseph R. Fluorophore Coupling to Internal Modes of Bragg Gratings. *Journal of Physical Chemistry C* 2020 p. -

Bak, Ohheum; Holstad, Theodor Secanell; Tan, Yueze; Lu, Haidong; Evans, Donald; Hunnestad, Kasper Aas; Wang, Bo; McConville, James P. V.; Becker, Petra; Bohatý, Ladislav; Lukyanchuk, Igor; Vinokur, Valerii M.; Helvoort, Antonius T. J. van; Gregg, J Marty; Chen, Long-Qing; Meier, Dennis Gerhard; Gruverman, Alexei. Observation of Unconventional Dynamics of Domain Walls in Uniaxial Ferroelectric Lead Germanate. *Advanced Functional Materials* 2020 ;Volume 30.(21) p. -

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Beckwith, Kai Sandvold; Beckwith, Marianne Sandvold; Ullmann, Sindre; Sætra, Ragnhild Sofie Ragnhildstveit; Kim, Haelin; Marstad, Anne; Åsberg, Signe Elisabeth; Strand, Trine Aakvik; Haug, Markus; Niederweis, Michael; Stenmark, Harald Alfred; Flo, Trude Helen. Plasma membrane damage causes NLRP3 activation and pyroptosis during Mycobacterium tuberculosis infection. Nature Communications 2020 ;Volume 11.

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