

**Redox-active, organometallic surface-relief gratings from azobenzene-containing polyferrocenylsilane block copolymers**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Enablers and barriers of smart data-based asset management services in industrial business networks**

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Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review

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Research output: Contribution to journal > Article > Scientific > peer-review

**Modeling of steels and steel surfaces using quantum mechanical first principles methods**

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**Static friction measurements on steel against uncoated and coated cast iron**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Democratizing composites manufacturing -inexpensive tooling empowers new players**

Antin, K. N. & Pärnänen, T., 1 Jul 2017, In : *SAMPE Journal*. 53, 4, p. 6-10 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Nonlinear model predictive energy management of hydrostatic drive transmissions**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Moving Web and Dynamic Problem of Aerothermoelastic Vibrations and Instability**

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**Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> Nano-heterostructure Photoanodes for Highly Efficient Solar Water Oxidation**

Barreca, D., Carraro, G., Gasparotto, A., Maccato, C., Warwick, M. E. A., Kaunisto, K., Sada, C., Turner, S., Gönüllü, Y., Ruoko, T-P., Borgese, L., Bontempi, E., Van Tendeloo, G., Lemmetyinen, H. & Mathur, S., 2015, In : *Advanced Materials Interfaces*. 2, 17

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**Vapor Phase Fabrication of Nanoheterostructures Based on ZnO for Photoelectrochemical Water Splitting**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Second-harmonic generation imaging of semiconductor nanowires with focused vector beams**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Circular dichroism in the second harmonic field evidenced by asymmetric Au coated GaAs nanowires**

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#### **The correlation between gear contact friction and ball on disc friction measurements**

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Research output: Contribution to journal › Article › Scientific › peer-review

#### **Waves in hyperbolic and double negative metamaterials including rogues and solitons**

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#### **Wear and impact behaviour of High Velocity Air-Fuel sprayed Fe-Cr-Ni-B-C alloy coatings**

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Research output: Contribution to journal › Article › Scientific › peer-review

#### **Graphoepitaxial Directed Self-Assembly of Polystyrene-Block-Polydimethylsiloxane Block Copolymer on Substrates Functionalized with Hexamethyldisilazane to Fabricate Nanoscale Silicon Patterns**

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Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Erbium-doped borosilicate glasses containing various amounts of P2O5 and Al2O3: Influence of the silica content on the structure and thermal, physical, optical and luminescence properties**

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#### **Design and Control of a Flexible Joint as a Hydraulic Series Elastic Actuator for Manipulation Applications**

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**Second-Harmonic Generation from Metal Nanoparticles: Resonance Enhancement versus Particle Geometry**

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**Less Is More: Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density**

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**Naturally occurring amino acids: A suitable substitute of N-N'-di-phenyl guanidine (DPG) in silica tyre formulation?**

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**Conductivity control via minimally invasive anti-Frenkel defects in a functional oxide**

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**Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals**

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**Flux-Weakening Control for IPMSM Employing Model Order Reduction**

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**Investigation on positioning control strategy and switching optimization of an equal coded digital valve system**

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**Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO)**

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**Improved dimensional stability with bioactive glass fibre skeleton in poly(lactide-co-glycolide) porous scaffolds for tissue engineering**

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**Effect of finish rolling and quench stop temperatures on impact-abrasive wear resistance of 0.35 % carbon direct-quenched steel**

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### **Effects of added glazing on Balcony indoor temperatures: Field measurements**

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### **Dissolution, bioactivity and osteogenic properties of composites based on polymer and silicate or borosilicate bioactive glass**

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### **Behaviour of leaded tin bronze in simulated seawater in the absence and presence of tribological contact with alumina counterbody: Corrosion, wear and tribocorrosion**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Impact wear and mechanical behavior of steels at subzero temperatures**

Valtonen, K., Ratia, V., Ramakrishnan, K. R., Apostol, M., Terva, J. & Kuokkala, V-T., 2019, In : Tribology International. 129, p. 476-493 18 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effects of adiabatic heating estimated from tensile tests with continuous heating**

Vazquez Fernandez, N., Isakov, M., Hokka, M. & Kuokkala, V. T., 2018, *Dynamic Behavior of Materials - Proceedings of the 2017 Annual Conference on Experimental and Applied Mechanics*. Springer New York LLC, Vol. 1. p. 1-7 7 p. (Conference Proceedings of the Society for Experimental Mechanics).

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

**Low temperature afterglow from SrAl<sub>2</sub>O<sub>4</sub>: Eu, Dy, B containing glass**

Vitola, V., Lahti, V., Bite, I., Spustaka, A., Millers, D., Lastusaari, M., Petit, L. & Smits, K., 2020, In : Scripta Materialia. 190, p. 86-90 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Erosive-abrasive wear behavior of carbide-free bainitic and boron steels compared in simulated field conditions**

Vuorinen, E., Heino, V., Ojala, N., Haiko, O. & Hedayati, A., 2018, In : Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology. 232, 1, p. 3-13 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Bioactive glass ions induce efficient osteogenic differentiation of human adipose stem cells encapsulated in gellan gum and collagen type I hydrogels**

Vuornos, K., Ojansivu, M., Koivisto, J. T., Häkkänen, H., Belay, B., Montonen, T., Huhtala, H., Kääriäinen, M., Hupa, L., Kellomäki, M., Hyttinen, J., Ihalainen, J. A. & Miettinen, S., 1 Jun 2019, In : Materials Science and Engineering C. 99, p. 905-918 14 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Do properties of bioactive glasses exhibit mixed alkali behavior?**

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Research output: Contribution to journal > Article > Scientific > peer-review

**Co-electrospun blends of PU and PEG as potential biocompatible scaffolds for small-diameter vascular tissue engineering**

Wang, H., Feng, Y., Fang, Z., Yuan, W. & Khan, M., 1 Dec 2012, In : Materials Science and Engineering C: Materials for Biological Applications. 32, 8, p. 2306-2315 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**An Artificial Nocturnal Flower via Humidity-Gated Photoactuation in Liquid Crystal Networks**

Wani, O. M., Verpaalen, R., Zeng, H., Priimagi, A. & Schenning, A. P. H. J., Jan 2019, In : Advanced Materials. 31, 2, 1805985.

Research output: Contribution to journal > Article > Scientific > peer-review

**Operating point dependent variable switching point predictive current control for PMSM drives**

Wendel, S., Karamanakos, P., Dietz, A. & Kennel, R., 1 May 2019, *PRECEDE 2019: 2019 IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics*. IEEE, p. 1-6 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Transfer printing of metallic microstructures on adhesion-promoting hydrogel substrates**

Wu, H., Sariola, V., Zhu, C., Zhao, J., Sitti, M. & Bettinger, C. J., 1 Jun 2015, In : *Advanced Materials*. 27, 22, p. 3398-3404 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Dimension reduction and decomposition using causal graph and qualitative analysis for aircraft concept design optimization**

Wu, D., Coatanea, E. & Wang, G. G., 2017, *43rd Design Automation Conference*. The American Society of Mechanical Engineers ASME

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

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Research output: Contribution to journal › Article › Scientific › peer-review

**Biomimetic hemo-compatible surfaces of polyurethane by grafting copolymer brushes of poly(ethylene glycol) and poly(phosphorylcholine methacrylate)**

Yang, D., Feng, Y., Behl, M., Lendlein, A., Zhao, H., Khan, M. & Guo, J., 2012, *Multifunctional Polymer-Based Materials*. Vol. 1403. p. 171-176 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Shedding frequency in cavitation erosion evolution tracking**

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Research output: Contribution to journal › Article › Scientific › peer-review

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Research output: Contribution to journal › Article › Scientific › peer-review

**Viewpoint: Pavlovian Materials—Functional Biomimetics Inspired by Classical Conditioning**

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Research output: Contribution to journal › Article › Scientific › peer-review