

### **Activation in organic and macromolecular including peptide synthesis by fluorinated carboxylic acids and derivatives**

Percec, Virgil; **Adamson, Jasper**; Maurya, Devendra S. European journal of organic chemistry 2025 / 11 p.

<https://doi.org/10.1002/ejoc.202500776>

### **Application of Petri nets for modelling production system**

**Kekshin, Vjatsheslav**; Lobov, Andrei IFAC-PapersOnLine 2025 / p. 1784-1789 <https://doi.org/10.1016/j.ifacol.2025.09.300>

<https://www.sciencedirect.com/science/article/pii/S2405896325010614>

### **AR/VR Digital Twin for simulation and data collection of robotic environments**

Martins, João G.; **Nutonen, Karle**; Costa, Paulo; **Kuts, Vladimir, Otto, Tauno**; Sousa, Armando; Petry, Marcelo R. 2025 IEEE

International Conference on Autonomous Robot Systems and Competitions (ICARSC) 2025 / 6 p

<https://doi.org/10.1109/ICARSC65809.2025.10970158>

### **Atomic structure, dynamics, changes in chemical bonding and semiconductor-metal transition in Sb<sub>2</sub>Se<sub>3</sub> : A remarkable material for quantum networks and energy applications**

Kassem, Mohammad; Benmore, Chris J.; Tverjanovich, Andrey; Bokova, Maria; Khomenko, Maxim; Usuki, Takeshi; Sokolov, Anton;

Fontanari, Daniele; **Bereznev, Sergei**; Ohara, Koji ACS applied materials & interfaces 2025 / p. 17075-17095

<https://doi.org/10.1021/acsami.5c00008>

### **Collaboration Between Industrial, Collaborative, Humanoid Robots and Humans**

**Kekšin, Vjatšeslav**; **Ponomar, Sergei**; **Sarkans, Martinš**; **Kuts, Vladimir**; **Pavlov, Sergei** Journal of Machine Engineering 2025 /

p. 100-110 : ill <https://doi.org/10.36897/jme/203790>

### **Co-simulations of induction machines coupled with a radial ball bearing for mechanical defects analysis**

**El Bouharrouti, Nada**; **Sitnikov, Maksim**; **Hemeida, Ahmed**; **Martin, Floran**; **Kudelina, Karolina**; **Naseer, Muhammad Usman**;

**Belahcen, Anouar** IET Electric Power Applications 2025 / 13 p. : ill <http://dx.doi.org/10.1049/elp2.12529>

### **Dark patterns in subscription service cancellation processes**

Nembaware, Fadza Emmah; **Da Costa Sousa, Sonia Claudia** ECCE 2025 : Proceedings of the 36th Annual Conference of the

European Association of Cognitive Ergonomics (EACE) 2025 / art. 29, 4 p <https://doi.org/10.1145/3746175.3746211>

### **Design, synthesis, and self-organization of nature- and bio-inspired homochiral helical complex systems**

Percec, Virgil; **Adamson, Jasper**; Sahoo, Dipankar; Maurya, Devendra S. Synthesis 2025 / 17 p <https://doi.org/10.1055/a-2685-2029>

### **Human-robot interaction : a conceptual framework for safety/risk analysis**

**Matsulevitš, Johannes**; **Majak, Jüri**; **Eerme, Martin**; **Sarkans, Martinš**; **Dunajeva, Olga**; **Kristjuhan-Ling, Kadri**; **Raamets,**

**Tõnis**; **Kekšin, Vjatšeslav** Proceedings of the Estonian Academy of Sciences 2025 / p. 137-142

<https://doi.org/10.3176/proc.2025.2.09>

### **In AI we trust : Human-centred AI explanations for early dementia risk prediction**

Sion, Yulia; **Da Costa Sousa, Sonia Claudia**; Lamas, David ECCE 2025 : Proceedings of the 36th Annual Conference of the

European Association of Cognitive Ergonomics (EACE) 2025 / art. 14, 7 p <http://doi.org/10.1145/3746175.3746195>

### **The influence of real-time trust assessment and adaptive feedback on users' trust in Artificial intelligence : Autonomous vehicle case study**

Ajenaghughrure, Ighoyota Ben; **Da Costa Sousa, Sonia Claudia**; **Lamas, David** ECCE 2025 : Proceedings of the 36th Annual

Conference of the European Association of Cognitive Ergonomics (EACE) 2025 / art. 47 <http://doi.org/10.1145/3746175.3746217>

### **Kinetic Modeling of Deep Oxidative Desulfurization over Functionalized UiO-66 from a Model Fuel Using Complex Reaction Theory**

**Barghi, Bijan**; **Möistlik, Tanel**; **Panov, Deniss**; **Raag, Anastassia**; **Järvik, Oliver**; **Niidu, Allan** ACS Omega 2025 / p. 15947-

15958 <https://doi.org/10.1021/acsomega.4c06722>

### **Multi-Rate Vibration Signal Analysis for Enhanced Data-Driven Monitoring of Bearing Faults in Induction Machines**

**El Bouharrouti, Nada**; **Koveshnikov, Semen**; **Garcia-Calva, Tomas Alberto**; **Vehvilainen, Milla**; **Kudelina, Karolina**; **Naseer,**

**Muhammad Usman**; **Vaimann, Toomas**; **Belahcen, Anouar** 2024 International Conference on Electrical Machines, ICEM 2024

2024 / 7 p. <http://dx.doi.org/10.1109/ICEM60801.2024.10700488>

### **Neuro-fuzzy approach for fault prediction of mechanical bearing faults using vibration analysis**

**Shirokova, Veroonika**; **Kudelina, Karolina**; **Raja, Hadi Ashraf**; **Rjabtšikov, Viktor**; **Baraškova, Tatjana**; **Nutonen, Karle**

IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics

Society 2024 / p. 1-6 <https://doi.org/10.1109/IECON55916.2024.10905990> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Overview of the development of cybersecurity in data transmission protocols used in industry**

**Ponomar, Sergei**; **Sarkans, Martinš** Proceedings of the Estonian Academy of Sciences 2025 / 6, p. 143-148

<https://doi.org/10.3176/proc.2025.2.11>

### **Production of hydrogen from packaging wastes by two-stage pyrolysis**

**Penežko, Aleksei; Pihl, Olga; Suštšik, Dmitri; Nossov, Aleksandr; Khaskhachikh, Vladimir** Waste Management Production of hydrogen from packaging wastes by two-stage pyrolysis 2025 / art. 115068 <https://doi.org/10.1016/j.wasman.2025.115068>  
<https://www.sciencedirect.com/science/article/pii/S0956053X25004799>

### **Proposing Heuristics to Calibrate Perceived Trust in the User Interface Design**

**Paramonova, Iuliia; Lamas, David; Da Costa Sousa, Sonia Claudia** ECCE 2025 : Proceedings of the 36th Annual Conference of the European Association of Cognitive Ergonomics (EACE) 2025 / p. 1-9 <https://doi.org/10.1145/3746175.374620>

### **Thermal stability of amine and carboxylic acid based protic ionic liquids from the perspective of thermal energy storage**

**Kaljusmaa, Liisa-Maria; Tubli, Diandra; Adamson, Jasper; Konist, Alar; Järvik, Oliver** Journal of Molecular Liquids 2025 / art. 127396 <https://doi.org/10.1016/j.molliq.2025.127396>

### **Trust and Trustworthiness from Human-Centered Perspective in Human–Robot Interaction (HRI)—A Systematic Literature Review**

**Firmino de Souza, Debora; Da Costa Sousa, Sonia Claudia; Kristjuhan-Ling, Kadri; Dunajeva, Olga; Roosileht, Mare; Pentel, Avar; Möttus, Mati; Özdemir, Mustafa Can; Gratšjova, Žanna** Electronics 2025 / art. 1557  
<https://doi.org/10.3390/electronics14081557> <https://www.mdpi.com/2079-9292/14/8/1557>

### **Utilizing the fuzzy logic algorithm for cartesian robot control system in conditions of mechanical damage transmission**

**Dunaeva, Olga; Autsou, Siarhei; Kudelina, Karolina; Roosileht, Mare** IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society IECON Proceedings (Industrial Electronics Conference) 2024 / 5 p  
<https://doi.org/10.1109/IECON55916.2024.10905445> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Vertrauenswürdiges Systemdesign – die Perspektive des Faktors Mensch**

**Da Costa Sousa, Sonia Claudia; Beltrao, Gabriela; Paramonova, Iuliia; Firmino de Souza, Debora C.** Künstliche Intelligenz in der Militärtechnologie: Soziologische, kulturelle und ethische Perspektiven 2025 / p. 211-230 [https://doi.org/10.1007/978-3-658-47996-1\\_10](https://doi.org/10.1007/978-3-658-47996-1_10)