Florian C Spieckermann

List of Publications by Citations

47 papers	486 citations	12 h-index	20 g-index
51 ext. papers	624 ext. citations	4.5 avg, IF	3.58 L-index

#	Paper	IF	Citations
47	Mechanical properties of filled antimonide skutterudites. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 170, 26-31	3.1	83
46	Rapid and partial crystallization to design ductile CuZr-based bulk metallic glass composites. *Materials and Design*, **2018**, 139, 132-140	8.1	36
45	Universally scaling Hall-Petch-like relationship in metallic glass matrix composites. *International Journal of Plasticity*, **2018**, 105, 225-238	7.6	33
44	X-ray line profile analysis: An ideal tool to quantify structural parameters of nanomaterials. *Jom*, **2011**, 63, 61-70	2.1	32
43	Mechanism of low temperature deformation in aluminium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 795, 139935	5.3	25
42	Outstanding strengthening behavior and dynamic mechanical properties of in-situ Al/Al3Ni composites by Cu addition. *Composites Part B: Engineering*, **2020**, 189, 107891	10	21
41	Determination of lamella thickness distributions in isotactic polypropylene by X-ray line profile analysis. *Polymer*, **2010**, 51, 4195-4199	3.9	20
40	The role of dislocations in iPP under plastic deformation investigated by X-ray line profile analysis. *Mechanics of Materials*, **2013**, 67, 126-132	3.3	18
39	Dislocation Movement Induced by Molecular Relaxations in Isotactic Polypropylene. *Macromolecules*, **2017**, 50, 6362-6368	5.5	18
38	Atomic origin for rejuvenation of a Zr-based metallic glass at cryogenic temperature. *Journal of Alloys and Compounds*, **2017**, 718, 254-259	5.7	16
37	Structural modifications in sub-Tg annealed CuZr-based metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 707, 245-252	5.3	13
36	Room temperature recovery of cryogenically deformed aluminium alloys. *Materials and Design*, **2020**, 193, 108819	8.1	13
35	The role of dislocations for the plastic deformation of semicrystalline polymers as investigated by multireflection X-ray line profile analysis. *Journal of Applied Polymer Science*, **2012**, 125, 4150-4154	2.9	11
34	Micropatterning kinetics of different glass-forming systems investigated by thermoplastic net-shaping. *Scripta Materialia*, **2017**, 137, 127-131	5.6	10
33	Dual self-organised shear banding behaviours and enhanced ductility in phase separating Zr-based bulk metallic glasses. *Philosophical Magazine*, **2018**, 98, 1744-1764	1.6	10
32	Rate mechanism and dislocation generation in high density polyethylene and other semicrystalline polymers. *Polymer*, **2014**, 55, 1217-1222	3.9	10
31	Determination of Critical Strains in Isotactic Polypropylene by Cyclic Loading-Unloading. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2009**, 131,	1.8	10

30	Annealing-assisted high-pressure torsion in Zr55Cu30Al10Ni5 metallic glass. *Journal of Alloys and Compounds*, **2019**, 784, 1323-1333	5.7	10
29	In-Situ Synchrotron Profile Analysis after High-Pressure Torsion Deformation. *Crystals*, **2019**, 9, 232	2.3	8
28	Stability of shear banding process in bulk metallic glasses and composites. *Journal of Materials Research*, **2017**, 32, 2560-2569	2.5	8
27	The influence of crystallization conditions on the macromolecular structure and strength of polypropylene. *Thermochimica Acta*, **2019**, 677, 131-138	2.9	6
26	X-ray diffraction study of iPP/cand iPP/TiO2 composites relating to micromechanical properties. *Journal of Applied Polymer Science*, **2012**, 124, 3147-3153	2.9	6
25	Analysis of strain bursts during nanoindentation creep of high-density polyethylene. *Polymer International*, **2015**, 64, 1537-1543	3.3	6
24	Composite of medium entropy alloys synthesized using spark plasma sintering. *Scripta Materialia*, **2021**, 191, 46-51	5.6	6
23	Fast and direct determination of fragility in metallic glasses using chip calorimetry. *Heliyon*, **2019**, 5, e01334	3.4	5
22	Fabrication of Metastable Crystalline Nanocomposites by Flash Annealing of CuZrAl Metallic Glass Using Joule Heating. *Nanomaterials*, **2020**, 10,	5.4	5
21	Mechanism of high-pressure torsion-induced shear banding and lamellar thickness saturation in CoCrFeNiNb high-entropy composites. *Journal of Materials Research*, **2019**, 34, 2672-2682	2.5	4
20	Characterization of strain bursts in high density polyethylene by means of a novel nano creep test. *International Journal of Plasticity*, **2019**, 116, 297-313	7.6	4
19	Application of composite models to isotactic polypropylene for the determination of phase specific stress–strain curves. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 483-484, 76-78	5.3	4
18	From elastic excitations to macroscopic plasticity in metallic glasses. *Applied Materials Today*, **2021**, 22, 100958	6.6	4
17	Reversing and non-reversing effects of PEEK-HA composites on tuning cooling rate during crystallization. *Journal of Polymer Research*, **2019**, 26, 1	2.7	4
16	Microstructures, Martensitic Transformation, and Mechanical Behavior of Rapidly Solidified Ti-Ni-Hf and Ti-Ni-Si Shape Memory Alloys. *Journal of Materials Engineering and Performance*, **2018**, 27, 1005-1015	1.6	3
15	Plasticity and X-ray Line Profile Analysis of the semicrystalline polymer poly(3-hydroxybutyrate). *Journal of Physics: Conference Series*, **2010**, 240, 012146	0.3	3
14	Structure-dynamics relationships in cryogenically deformed bulk metallic glass.. *Nature Communications*, **2022**, 13, 127	17.4	3
13	Effect of high pressure torsion on crystallization and magnetic properties of Fe73.9Cu1Nb3Si15.5B6.6. *Journal of Magnetism and Magnetic Materials*, **2021**, 525, 167679	2.8	3

12	Ageing Behaviour of Al-Mg-Si Alloys After Cryogenic and Room Temperature Deformation. *Materials*, **2020**, 13,	3.5	2
11	Maximizing the degree of rejuvenation in metallic glasses. *Scripta Materialia*, **2022**, 212, 114575	5.6	2
10	Crystalline plasticity in isotactic polypropylene below and above the glass transition temperature. *EXPRESS Polymer Letters*, **2015**, 9, 894-900	3.4	2
9	Morphology and properties of foamed high crystallinity PEEK prepared by high temperature thermally induced phase separation. *Journal of Applied Polymer Science*, **2022**, 139, 51423	2.9	2
8	X-ray Diffraction Computed Nanotomography Applied to Solve the Structure of Hierarchically Phase-Separated Metallic Glass. *ACS Nano*, **2021**, 15, 2386-2398	16.7	2
7	Strain perceptibility of elements on the diffusion in Zr-based amorphous alloys. *Scientific Reports*, **2020**, 10, 4575	4.9	1
6	. *IEEE Transactions on Magnetics*, **2016**, 52, 1-7	2	1
5	Coiled artificial muscles based on UHMWPE with large muscle stroke. *Materials Today Communications*, **2019**, 21, 100688	2.5	1
4	Transition metal-based high entropy alloy microfiber electrodes: Corrosion behavior and hydrogen activity. *Corrosion Science*, **2021**, 193, 109880	6.8	0
3	Deformation-Mode-Sensitive Behavior of CuZr-Based Bulk Metallic Glasses Under Dynamic Loading. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2021**, 52, 8-13	2.3	0
2	In Situ Synchrotron X-Ray Diffraction during High-Pressure Torsion Deformation of Ni and NiTi. *Advanced Engineering Materials*, **2021**, 23, 2100159	3.5	0
1	In Situ X-Ray Synchrotron Profile Analysis During High Pressure Torsion of Ti. *Minerals, Metals and Materials Series*, **2017**, 645-651	0.3	