Minnamari Vippola

List of Publications by Citations

118 papers	3,435 citations	31 h-index	55 g-index
123 ext. papers	3,803 ext. citations	4.3 avg, IF	5.03 L-index

#	Paper	IF	Citations
118	Optimized dispersion of nanoparticles for biological in vitro and in vivo studies. *Particle and Fibre Toxicology*, **2008**, 5, 14	8.4	346
117	Long, needle-like carbon nanotubes and asbestos activate the NLRP3 inflammasome through a similar mechanism. *ACS Nano*, **2011**, 5, 6861-70	16.7	318
116	Genotoxicity of nanomaterials: DNA damage and micronuclei induced by carbon nanotubes and graphite nanofibres in human bronchial epithelial cells in vitro. *Toxicology Letters*, **2009**, 186, 166-73	4.4	232
115	Genotoxic effects of nanosized and fine TiO2. *Human and Experimental Toxicology*, **2009**, 28, 339-52	3.4	176
114	Proteomic characterization of engineered nanomaterial-protein interactions in relation to surface reactivity. *ACS Nano*, **2011**, 5, 4300-9	16.7	137
113	Airway exposure to silica-coated TiO2 nanoparticles induces pulmonary neutrophilia in mice. *Toxicological Sciences*, **2010**, 113, 422-33	4.4	123
112	Nanotechnologies, engineered nanomaterials and occupational health and safety □A review. *Safety Science*, **2010**, 48, 957-963	5.8	123
111	Genotoxicity of polyvinylpyrrolidone-coated silver nanoparticles in BEAS 2B cells. *Toxicology*, **2013**, 313, 38-48	4.4	85
110	Topically applied ZnO nanoparticles suppress allergen induced skin inflammation but induce vigorous IgE production in the atopic dermatitis mouse model. *Particle and Fibre Toxicology*, **2014**, 11, 38	8.4	76
109	Inhalation of rod-like carbon nanotubes causes unconventional allergic airway inflammation. *Particle and Fibre Toxicology*, **2014**, 11, 48	8.4	68
108	Wear and corrosion properties of plasma sprayed Al2O3 and Cr2O3 coatings sealed by aluminum phosphates. *Journal of Thermal Spray Technology*, **1997**, 6, 205-210	2.5	60
107	Aluminum phosphate sealed alumina coating: characterization of microstructure. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2002**, 323, 1-8	5.3	60
106	A comprehensive review of the photopolymerization of ceramic resins used in stereolithography. *Additive Manufacturing*, **2020**, 35, 101177	6.1	52
105	Utilization of Barkhausen noise magnetizing sweeps for case-depth detection from hardened steel. *NDT and E International*, **2012**, 52, 95-102	4.1	49
104	Vibration damping properties of steel/rubber/composite hybrid structures. *Composite Structures*, **2012**, 94, 3327-3335	5.3	48
103	Modified thick thermal barrier coatings: microstructural characterization. *Journal of the European Ceramic Society*, **2004**, 24, 2247-2258	6	48
102	A Single Aspiration of Rod-like Carbon Nanotubes Induces Asbestos-like Pulmonary Inflammation Mediated in Part by the IL-1 Receptor. *Toxicological Sciences*, **2015**, 147, 140-55	4.4	47

101	Preparation of nanoparticle dispersions for in-vitro toxicity testing. *Human and Experimental Toxicology*, **2009**, 28, 377-85	3.4	45
100	Free radical scavenging and formation by multi-walled carbon nanotubes in cell free conditions and in human bronchial epithelial cells. *Particle and Fibre Toxicology*, **2014**, 11, 4	8.4	43
99	Properties of HVOF-sprayed Stellite-6 coatings. *Surface and Coatings Technology*, **2018**, 338, 45-62	4.4	40
98	Impact properties of novel corrosion resistant hybrid structures. *Composite Structures*, **2014**, 108, 886-893	5.3	39
97	Corrosion products of carbonation induced corrosion in existing reinforced concrete facades. *Cement and Concrete Research*, **2015**, 78, 200-207	10.3	37
96	Metal–Plastic Adhesion in Injection-Molded Hybrids. *Journal of Adhesion Science and Technology*, **2009**, 23, 1747-1761	2	37
95	Thermal analysis of plasma sprayed oxide coatings sealed with aluminium phosphate. *Journal of the European Ceramic Society*, **2002**, 22, 1937-1946	6	35
94	Characterization of silane layers on modified stainless steel surfaces and related stainless steel–plastic hybrids. *Applied Surface Science*, **2011**, 257, 9335-9346	6.7	33
93	Generation of silver/palladium nanoparticles by liquid flame spray. *Journal of Materials Research*, **2004**, 19, 1544-1550	2.5	33
92	Residual stresses in aluminium phosphate sealed plasma sprayed oxide coatings and their effect on abrasive wear. *Wear*, **2002**, 252, 614-623	3.5	33
91	Induction of chromosomal aberrations by carbon nanotubes and titanium dioxide nanoparticles in human lymphocytes in vitro. *Nanotoxicology*, **2012**, 6, 825-36	5.3	32
90	Structural Characterization of Aluminum Phosphate Binder. *Journal of the American Ceramic Society* , **2004**, 83, 1834-1836	3.8	32
89	A Study of Cr3C2-Based HVOF- and HVAF-Sprayed Coatings: Microstructure and Carbide Retention. *Journal of Thermal Spray Technology*, **2017**, 26, 1239-1256	2.5	31
88	The activity of Pt/Al2O3 diesel oxidation catalyst after sulphur and calcium treatments. *Catalysis Today*, **2010**, 154, 303-307	5.3	31
87	Development of Barkhausen noise calibration blocks for reliable grinding burn detection. *Journal of Materials Processing Technology*, **2012**, 212, 408-416	5.3	30
86	A secretomics analysis reveals major differences in the macrophage responses towards different types of carbon nanotubes. *Nanotoxicology*, **2015**, 9, 719-28	5.3	26
85	Regeneration of sulfur-poisoned Pd-based catalyst for natural gas oxidation. *Journal of Catalysis*, **2018**, 358, 253-265	7.3	26
84	Superamphiphobic overhang structured coating on a biobased material. *Applied Surface Science*, **2016**, 389, 135-143	6.7	25

83	Characterization of modified thick thermal barrier coatings. *Journal of Thermal Spray Technology*, **2004**, 13, 361-369	2.5	24
82	Structural Characteristics of Natural-Gas-Vehicle-Aged Oxidation Catalyst. *Topics in Catalysis*, **2013**, 56, 576-585	2.3	23
81	Sol-gel derived aluminosilicate coatings on alumina as substrate for osteoblasts. *Acta Biomaterialia*, **2006**, 2, 659-68	10.8	23
80	Effect of Shot Peening Parameters to Residual Stress Profiles and Barkhausen Noise. *Journal of Nondestructive Evaluation*, **2018**, 37, 1	2.1	21
79	An Efficient Procedure for Identifying the Prediction Model Between Residual Stress and Barkhausen Noise. *Journal of Nondestructive Evaluation*, **2013**, 32, 341-349	2.1	21
78	Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials: implications for testing and risk assessment. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	21
77	Ageing of corrosion resistant steel/rubber/composite hybrid structures. *International Journal of Adhesion and Adhesives*, **2014**, 49, 26-32	3.4	21
76	Insight to Nanoparticle Size Analysis-Novel and Convenient Image Analysis Method Versus Conventional Techniques. *Nanoscale Research Letters*, **2016**, 11, 169	5	20
75	Accelerated deactivation studies of the natural-gas oxidation catalyst: Verifying the role of sulfur and elevated temperature in catalyst aging. *Applied Catalysis B: Environmental*, **2016**, 182, 439-448	21.8	20
74	The effect of Pt?Rh synergism on the thermal stability of rhodium oxide on pure alumina and Ce?ZrO2-modified alumina-supported catalysts. *Journal of Catalysis*, **2004**, 226, 372-381	7.3	20
73	Hydrothermal carbonization of pulp mill streams. *Bioresource Technology*, **2016**, 212, 236-244	11	19
72	Collection of liquid flame spray generated TiO2 nanoparticles on stainless steel surface. *Materials Letters*, **2006**, 60, 530-534	3.3	19
71	Aligned Poly(ε-caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro. *Macromolecular Bioscience*, **2017**, 17, 1600517	5.5	17
70	Limitations of eddy current inspection in railway rail evaluation. *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, **2018**, 232, 121-129	1.4	17
69	The formation and characterization of fretting-induced degradation layers using quenched and tempered steel. *Tribology International*, **2019**, 131, 258-267	4.9	17
68	Effect of silane treatment parameters on the silane layer formation and bonding to thermoplastic urethane. *Progress in Organic Coatings*, **2011**, 72, 716-723	4.8	16
67	The Effect of SO2 and H2O on the Activity of Pd/CeO2 and Pd/ZrCeO2 Diesel Oxidation Catalysts. *Topics in Catalysis*, **2009**, 52, 2025-2028	2.3	16
66	Carbon-based nanomaterials accelerate arteriolar thrombus formation in the murine microcirculation independently of their shape. *Journal of Applied Toxicology*, **2014**, 34, 1167-76	4.1	15

65	Influence of thermal treatment conditions on the formation of phase-pure mullite derived from a nanoparticulate aluminosilicate precursor. *Materials Chemistry and Physics*, **2009**, 115, 56-64	4.4	15
64	Microstructural study of aluminum phosphate-sealed, plasma-sprayed chromium oxide coating. *Journal of Thermal Spray Technology*, **2002**, 11, 253-260	2.5	15
63	Effect of particle size and dispersion status on cytotoxicity and genotoxicity of zinc oxide in human bronchial epithelial cells. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2016**, 805, 7-18	3	15
62	Characterization of cracks formed in large flat-on-flat fretting contact. *International Journal of Fatigue*, **2019**, 124, 361-370	5	14
61	Adhesion properties of novel corrosion resistant hybrid structures. *International Journal of Adhesion and Adhesives*, **2014**, 49, 51-57	3.4	13
60	Deactivation of Diesel Oxidation Catalysts by Sulphur in Laboratory and Engine-Bench Scale Aging. *Topics in Catalysis*, **2013**, 56, 672-678	2.3	13
59	Barkhausen noise characterisation during elastic bending and tensile-compression loading of case-hardened and tempered samples. *Journal of Materials Science*, **2012**, 47, 6420-6428	4.3	13
58	Oxidation of copper alloys studied by analytical transmission electron microscopy cross-sectional specimens. *Journal of Materials Research*, **2008**, 23, 1350-1357	2.5	13
57	Low temperature oxidation of copper alloys: AEM and AFM characterization. *Journal of Materials Science*, **2007**, 42, 4684-4691	4.3	13
56	Pulmonary toxicity of FeO, ZnFeO, NiFeO and NiZnFeO nanomaterials: Inflammation and DNA strand breaks. *Environmental Toxicology and Pharmacology*, **2020**, 74, 103303	5.8	13
55	The Effect of Phosphorus Exposure on Diesel Oxidation Catalysts: Part I: Activity Measurements, Elementary and Surface Analyses. *Topics in Catalysis*, **2015**, 58, 961-970	2.3	12
54	Barkhausen noise-magnetizing voltage sweep measurement in evaluation of residual stress in hardened components. *Measurement Science and Technology*, **2014**, 25, 085602	2	12
53	Optimized laser processing of calibration blocks for grinding burn detection with Barkhausen noise. *Journal of Materials Processing Technology*, **2012**, 212, 2282-2293	5.3	12
52	Geometry Analysis in Screen-Printed Stretchable Interconnects. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2018**, 8, 1344-1352	1.7	11
51	Barkhausen Noise Probes and Modelling: A Review. *Journal of Nondestructive Evaluation*, **2019**, 38, 1	2.1	10
50	Structural changes in air aged and poisoned diesel catalysts. *Topics in Catalysis*, **2007**, 45, 137-142	2.3	10
49	Deactivation of Pt/SiO2-ZrO2 diesel oxidation catalysts by sulphur, phosphorus and their combinations. *Applied Catalysis B: Environmental*, **2017**, 218, 409-419	21.8	9
48	Aerosol characterization and lung deposition of synthesized TiO2 nanoparticles for murine inhalation studies. *Journal of Nanoparticle Research*, **2011**, 13, 2949-2961	2.3	9

47	BARKHAUSEN: A study on laser-processed grinding burn simulation and analysis based on Barkhausen noise measurement. *Insight: Non-Destructive Testing and Condition Monitoring*, **2010**, 52, 293-297	1.3	9
46	The Effect of Phosphorus Exposure on Diesel Oxidation Catalysts Part II: Characterization of Structural Changes by Transmission Electron Microscopy. *Topics in Catalysis*, **2015**, 58, 971-976	2.3	8
45	Metal thermoplastic urethane hybrids in environmental exposure. *International Journal of Adhesion and Adhesives*, **2012**, 35, 21-26	3.4	8
44	Characterisation of case-hardened gear steel by multiparameter Barkhausen noise measurements. *Insight: Non-Destructive Testing and Condition Monitoring*, **2009**, 51, 212-216	1.3	8
43	AEM study of aluminum phosphate sealed plasma sprayed Al2O3 and Cr2O3 coatings. *Journal of Materials Science Letters*, **2003**, 22, 463-466		8
42	Automated Ultrasound-based Inspection of Rails: Review. *International Journal of Railway*, **2017**, 10, 21-29		8
41	Electron microscopic studies of natural gas oxidation catalyst Effects of thermally accelerated aging on catalyst microstructure. *Journal of Catalysis*, **2017**, 349, 19-29	7.3	7
40	The effect of test parameters on the impact resistance of a stainless steel/rubber/composite hybrid structure. *Composite Structures*, **2014**, 113, 469-475	5.3	7
39	Characterisation of stainless steel surfaces modified in air at 350 C. *Surface Engineering*, **2011**, 27, 325-331	2.6	7
38	Characterization of phosphorus poisoning on diesel exhaust gas catalyst components containing oxide and Pt. *Topics in Catalysis*, **2007**, 45, 153-157	2.3	7
37	The effect of platinum on the reducibility of Rh oxides on Ce?Zr modified alumina supported automotive catalysts. *Surface and Interface Analysis*, **2004**, 36, 741-744	1.5	7
36	Additive Manufactured 316L Stainless-Steel Samples: Microstructure, Residual Stress and Corrosion Characteristics after Post-Processing. *Metals*, **2021**, 11, 182	2.3	7
35	Review of railway track applications of Barkhausen noise and other magnetic testing methods. *Insight: Non-Destructive Testing and Condition Monitoring*, **2014**, 56, 657-663	1.3	6
34	Characterisation of novel regenerated cellulosic, viscose, and cotton fibres and the dyeing properties of fabrics. *Coloration Technology*, **2015**, 131, 396-402	2	6
33	In vitro platelet activation, aggregation and platelet-granulocyte complex formation induced by surface modified single-walled carbon nanotubes. *Toxicology in Vitro*, **2015**, 29, 1132-9	3.6	6
32	Aminofunctional silane layers for improved copper polymer interface adhesion. *Journal of Materials Science*, **2011**, 46, 6618-6626	4.3	6
31	Cracks and degradation layers in large flat-on-flat fretting contact with steels and cast iron. *Tribology International*, **2020**, 145, 106102	4.9	6
30	The Impact of Sulphur, Phosphorus and their Co-effect on Pt/SiO2 ZrO2 Diesel Oxidation Catalysts. *Topics in Catalysis*, **2017**, 60, 307-311	2.3	5

29	Case Depth Prediction of Nitrided Samples with Barkhausen Noise Measurement. *Metals*, **2019**, 9, 325	2.3	5
28	Statistical Evaluation of Barkhausen Noise Testing (BNT) for Ground Samples. *Sensors*, **2019**, 19,	3.8	5
27	Characterization of Flame Cut Heavy Steel: Modeling of Temperature History and Residual Stress Formation. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2017**, 48, 2891-2901	2.5	5
26	Detailed Barkhausen noise and microscopy characterization of Jominy end-quench test sample of CF53 steel. *Journal of Materials Science*, **2020**, 55, 4896-4909	4.3	5
25	Microstructural Characteristics of Vehicle-Aged Heavy-Duty Diesel Oxidation Catalyst and Natural Gas Three-Way Catalyst. *Catalysts*, **2019**, 9, 137	4	4
24	The Characterization of Flame Cut Heavy Steel The Residual Stress Profiling of Heat Affected Surface Layer. *Key Engineering Materials*, **2016**, 674, 103-108	0.4	4
23	Role of Steel Plate Thickness on the Residual Stress Formation and Cracking Behavior During Flame Cutting. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 4178-4192	2.3	4
22	Utilization of frequency-domain information of Barkhausen noise signal in quantitative prediction of material properties **2014**,		4
21	Case depth verification of hardened samples with Barkhausen noise sweeps **2014**,		4
20	Influence of the elementary mixing scale on HVOF-sprayed coatings derived from nanostructured aluminosilicate/mullite feedstock. *Surface and Coatings Technology*, **2008**, 203, 335-344	4.4	4
19	The effect of inferior turbinate surgery on ciliated epithelium: A randomized, blinded study. *Laryngoscope*, **2019**, 129, 18-24	3.6	4
18	EFFECT OF ENVIRONMENT ON BROMOBUTYL RUBBERSTEEL ADHESION. *Rubber Chemistry and Technology*, **2020**, 93, 429-444	1.7	3
17	The Influence of Phosphorus Exposure on a Natural-Gas-Oxidation Catalyst. *Topics in Catalysis*, **2016** , 59, 1044-1048	2.3	3
16	The Effect of Sulphur and Water Treatments on the Performance of Pd/Zeolite Diesel Oxidation Catalysts. *Topics in Catalysis*, **2011**, 54, 1185-1189	2.3	3
15	Characterization of Pt-based oxidation catalyst Deactivated simultaneously by sulfur and phosphorus. *Journal of Catalysis*, **2021**, 397, 183-191	7.3	3
14	Coating of Silica and Titania Aerosol Nanoparticles by Silver Vapor Condensation. *Aerosol Science and Technology*, **2015**, 49, 767-776	3.4	2
13	The effect of substrate pre-treatment on durability of rubber-stainless steel adhesion. *Surfaces and Interfaces*, **2020**, 21, 100646	4.1	2
12	Prediction of Residual Stresses Using Partial Least Squares Regression on Barkhausen Noise Signals. *Journal of Nondestructive Evaluation*, **2013**, 33, 43	2.1	2

11	An Attempt to Find an Empirical Model between Barkhausen Noise and Stress. *Materials Science Forum*, **2013**, 768-769, 209-216	0.4	2
10	Effect of Microstructural Characteristics of Thick Steel Plates on Residual Stress Formation and Cracking during Flame Cutting. *Materials Performance and Characterization*, **2018**, 7, 20170083	0.5	2
9	Wear Reducing Effect of Embedded Quartz Abrasives in Crushing-Pin-on-Disc Procedure. *Tribology Online*, **2012**, 7, 179-183	0.9	2
8	Cracking and Failure Characteristics of Flame Cut Thick Steel Plates. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 1744-1754	2.3	1
7	Surface Layer Characterization of Shot Peened Gear Specimens. *Materials Performance and Characterization*, **2018**, 7, 20170169	0.5	1
6	PHASE-CHANGE MATERIAL: NATURAL RUBBER COMPOSITES FOR HEAT STORAGE APPLICATIONS. *Rubber Chemistry and Technology*, **2020**, 93, 208-221	1.7	1
5	Mimicking Barkhausen noise measurement by in-situ transmission electron microscopy - effect of microstructural steel features on Barkhausen noise. *Acta Materialia*, **2021**, 221, 117378	8.4	1
4	Effect of carbon nanotubes and nanodiamonds on the heat storage ability of natural rubber composites. *Journal of Elastomers and Plastics*, **2021**, 53, 311-322	1.6	0
3	The Effect of Severe Shot Peening on Fatigue Life of Laser Powder Bed Fusion Manufactured 316L Stainless Steel. *Materials*, **2022**, 15, 3517	3.5	0
2	The effect of carbon and nickel additions on the precursor synthesis of Cr3C2-Ni nanopowder. *Ceramics International*, **2018**, 44, 9338-9346	5.1	
1	Fabrication of self-supporting structures made of washcoat materials (Al2O3-CeO2) by ceramic stereolithography: Towards digital manufacturing of enhanced catalytic converters. *Materials and Design*, **2021**, 210, 110115	8.1	