Minnamari Vippola

List of Publications by Year
in descending order

120 papers	4,246 citations	126708 33 h-index	123241 61 g-index
123 all docs	123 docs citations	123 times ranked	5619 citing authors

#	Article	IF	Citations
1	Optimized dispersion of nanoparticles for biological in vitro and in vivo studies. Particle and Fibre Toxicology, 2008, 5, 14.	2.8	391
2	Long, Needle-like Carbon Nanotubes and Asbestos Activate the NLRP3 Inflammasome through a Similar Mechanism. ACS Nano, 2011, 5, 6861-6870.	7.3	359
3	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, 166-173.	0.4	259
4	Genotoxic effects of nanosized and fine TiO2. Human and Experimental Toxicology, 2009, 28, 339-352.	1.1	194
5	Nanotechnologies, engineered nanomaterials and occupational health and safety â€“ A review. Safety Science, 2010, 48, 957-963.	2.6	147
6	Proteomic Characterization of Engineered Nanomaterialâ€“Protein Interactions in Relation to Surface Reactivity. ACS Nano, 2011, 5, 4300-4309.	7.3	142
7	Airway Exposure to Silica-Coated TiO2 Nanoparticles Induces Pulmonary Neutrophilia in Mice. Toxicological Sciences, 2010, 113, 422-433.	1.4	140
8	A comprehensive review of the photopolymerization of ceramic resins used in stereolithography. Additive Manufacturing, 2020, 35, 101177.	1.7	133
9	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.	2.8	103
10	Genotoxicity of polyvinylpyrrolidone-coated silver nanoparticles in BEAS 2B cells. Toxicology, 2013, 313, 38-48.	2.0	96
11	Inhalation of rod-like carbon nanotubes causes unconventional allergic airway inflammation. Particle and Fibre Toxicology, 2014, 11, 48.	2.8	83
12	Aluminum phosphate sealed alumina coating: characterization of microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 323, 1-8.	2.6	71
13	Wear and corrosion properties of plasma sprayed AI2O3 and Cr2O3 coatings sealed by aluminum phosphates. Journal of Thermal Spray Technology, 1997, 6, 205-210.	1.6	70
14	Vibration damping properties of steel/rubber/composite hybrid structures. Composite Structures, 2012, 94, 3327-3335.	3.1	63
15	Utilization of Barkhausen noise magnetizing sweeps for case-depth detection from hardened steel. NDT and E International, 2012, 52, 95-102.	1.7	60
16	Corrosion products of carbonation induced corrosion in existing reinforced concrete facades. Cement and Concrete Research, 2015, 78, 200-207.	4.6	55
17	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, 140-155.	1.4	53
18	Properties of HVOF-sprayed Stellite-6 coatings. Surface and Coatings Technology, 2018, 338, 45-62.	2.2	53

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19	Modified thick thermal barrier coatings: microstructural characterization. Journal of the European Ceramic Society, 2004, 24, 2247-2258.	2.8	52
20	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.	2.8	49
21	Preparation of nanoparticle dispersions for in-vitro toxicity testing. Human and Experimental Toxicology, 2009, 28, 377-385.	1.1	47
22	Metalâ€“Plastic Adhesion in Injection-Molded Hybrids. Journal of Adhesion Science and Technology, 2009, 23, 1747-1761.	1.4	47
23	A Study of Cr3C2-Based HVOF- and HVAF-Sprayed Coatings: Microstructure and Carbide Retention. Journal of Thermal Spray Technology, 2017, 26, 1239-1256.	1.6	45
24	Structural Characterization of Aluminum Phosphate Binder. Journal of the American Ceramic Society, 2000, 83, 1834-1836.	1.9	44
25	Impact properties of novel corrosion resistant hybrid structures. Composite Structures, 2014, 108, 886-893.	3.1	42
26	Thermal analysis of plasma sprayed oxide coatings sealed with aluminium phosphate. Journal of the European Ceramic Society, 2002, 22, 1937-1946.	2.8	41
27	Regeneration of sulfur-poisoned Pd-based catalyst for natural gas oxidation. Journal of Catalysis, 2018, 358, 253-265.	3.1	41
28	Development of Barkhausen noise calibration blocks for reliable grinding burn detection. Journal of Materials Processing Technology, 2012, 212, 408-416.	3.1	40
29	Characterization of silane layers on modified stainless steel surfaces and related stainless steelâ€“plastic hybrids. Applied Surface Science, 2011, 257, 9335-9346.	3.1	39
30	Induction of chromosomal aberrations by carbon nanotubes and titanium dioxide nanoparticles in human lymphocytesin vitro. Nanotoxicology, 2012, 6, 825-836.	1.6	38
31	Superamphiphobic overhang structured coating on a biobased material. Applied Surface Science, 2016, 389, 135-143.	3.1	38
32	Residual stresses in aluminium phosphate sealed plasma sprayed oxide coatings and their effect on abrasive wear. Wear, 2002, 252, 614-623.	1.5	36
33	Generation of silver/palladium nanoparticles by liquid flame spray. Journal of Materials Research, 2004, 19, 1544-1550.	1.2	34
34	The activity of Pt/Al2O3 diesel oxidation catalyst after sulphur and calcium treatments. Catalysis Today, 2010, 154, 303-307.	2.2	34
35	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.	1.3	33
36	Effect of Shot Peening Parameters to Residual Stress Profiles and Barkhausen Noise. Journal of Nondestructive Evaluation, 2018, 37, 1.	1.1	30

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37	Characterization of Modified Thick Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2004, 13, 361-369.	1.6	29
38	A secretomics analysis reveals major differences in the macrophage responses towards different types of carbon nanotubes. Nanotoxicology, 2015, 9, 719-728.	1.6	29
39	An Efficient Procedure for Identifying the Prediction Model Between Residual Stress and Barkhausen Noise. Journal of Nondestructive Evaluation, 2013, 32, 341-349.	1.1	27
40	Structural Characteristics of Natural-Gas-Vehicle-Aged Oxidation Catalyst. Topics in Catalysis, 2013, 56, 576-585.	1.3	27
41	Pulmonary toxicity of Fe2O3, ZnFe2O4, NiFe2O4 and NiZnFe4O8 nanomaterials: Inflammation and DNA strand breaks. Environmental Toxicology and Pharmacology, 2020, 74, 103303.	2.0	27
42	Insight to Nanoparticle Size Analysisâ€"Novel and Convenient Image Analysis Method Versus Conventional Techniques. Nanoscale Research Letters, 2016, 11, 169.	3.1	26
43	The formation and characterization of fretting-induced degradation layers using quenched and tempered steel. Tribology International, 2019, 131, 258-267.	3.0	26
44	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.	0.8	25
45	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.	3.1	24
46	Solâ€"gel derived aluminosilicate coatings on alumina as substrate for osteoblasts. Acta Biomaterialia, 2006, 2, 659-668.	4.1	24
47	Accelerated deactivation studies of the natural-gas oxidation catalystâ€"Verifying the role of sulfur and elevated temperature in catalyst aging. Applied Catalysis B: Environmental, 2016, 182, 439-448.	10.8	24
48	Ageing of corrosion resistant steel/rubber/composite hybrid structures. International Journal of Adhesion and Adhesives, 2014, 49, 26-32.	1.4	23
49	Barkhausen Noise Probes and Modelling: A Review. Journal of Nondestructive Evaluation, 2019, 38, 1.	1.1	23
50	Additive Manufactured 316L Stainless-Steel Samples: Microstructure, Residual Stress and Corrosion Characteristics after Post-Processing. Metals, 2021, 11, 182.	1.0	23
51	Aligned Poly(Îµâ€caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cellâ€Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro. Macromolecular Bioscience, 2017, 17, 1600517.	2.1	22
52	Characterization of cracks formed in large flat-on-flat fretting contact. International Journal of Fatigue, 2019, 124, 361-370.	2.8	22
53	Effect of silane treatment parameters on the silane layer formation and bonding to thermoplastic urethane. Progress in Organic Coatings, 2011, 72, 716-723.	1.9	21
54	Hydrothermal carbonization of pulp mill streams. Bioresource Technology, 2016, 212, 236-244.	4.8	20

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55	Deactivation of Pt/SiO2-ZrO2 diesel oxidation catalysts by sulphur, phosphorus and their combinations. Applied Catalysis B: Environmental, 2017, 218, 409-419.	10.8	20
56	Microstructural Study of Aluminum Phosphate-Sealed, Plasma-Sprayed Chromium Oxide Coating. Journal of Thermal Spray Technology, 2002, 11, 253-260.	1.6	19
57	Collection of liquid flame spray generated TiO2 nanoparticles on stainless steel surface. Materials Letters, 2006, 60, 530-534.	1.3	19
58	Barkhausen noise characterisation during elastic bending and tensile-compression loading of case-hardened and tempered samples. Journal of Materials Science, 2012, 47, 6420-6428.	1.7	17
59	Adhesion properties of novel corrosion resistant hybrid structures. International Journal of Adhesion and Adhesives, 2014, 49, 51-57.	1.4	17
60	Barkhausen noise-magnetizing voltage sweep measurement in evaluation of residual stress in hardened components. Measurement Science and Technology, 2014, 25, 085602.	1.4	17
61	The Effect of Phosphorus Exposure on Diesel Oxidation Catalystsâ€"Part I: Activity Measurements, Elementary and Surface Analyses. Topics in Catalysis, 2015, 58, 961-970.	1.3	17
62	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.	0.9	17
63	Low temperature oxidation of copper alloysâ€"AEM and AFM characterization. Journal of Materials Science, 2007, 42, 4684-4691.	1.7	16
64	The Effect of SO2 and H2O on the Activity of Pd/CeO2 and Pd/Zrâ€"CeO2 Diesel Oxidation Catalysts. Topics in Catalysis, 2009, 52, 2025-2028.	1.3	16
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.	2.0	15
66	Carbonâ€based nanomaterials accelerate arteriolar thrombus formation in the murine microcirculation independently of their shape. Journal of Applied Toxicology, 2014, 34, 1167-1176.	1.4	15
67	The Effect of Severe Shot Peening on Fatigue Life of Laser Powder Bed Fusion Manufactured 316L Stainless Steel. Materials, 2022, 15, 3517.	1.3	15
68	Oxidation of copper alloys studied by analytical transmission electron microscopy cross-sectional specimens. Journal of Materials Research, 2008, 23, 1350-1357.	1.2	14
69	Optimized laser processing of calibration blocks for grinding burn detection with Barkhausen noise. Journal of Materials Processing Technology, 2012, 212, 2282-2293.	3.1	14
70	Deactivation of Diesel Oxidation Catalysts by Sulphur in Laboratory and Engine-Bench Scale Aging. Topics in Catalysis, 2013, 56, 672-678.	1.3	14
71	Geometry Analysis in Screen-Printed Stretchable Interconnects. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1344-1352.	1.4	13
72	Mimicking Barkhausen noise measurement by in-situ transmission electron microscopy - effect of microstructural steel features on Barkhausen noise. Acta Materialia, 2021, 221, 117378.	3.8	13

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73	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.	0.3	12
74	Metalâ€“thermoplastic urethane hybrids in environmental exposure. International Journal of Adhesion and Adhesives, 2012, 35, 21-26.	1.4	12
75	The Effect of Phosphorus Exposure on Diesel Oxidation Catalystsâ€”Part II: Characterization of Structural Changes by Transmission Electron Microscopy. Topics in Catalysis, 2015, 58, 971-976.	1.3	12
76	The effect of platinum on the reducibility of Rh oxides on Ceï£¿Zr modified alumina supported automotive catalysts. Surface and Interface Analysis, 2004, 36, 741-744.	0.8	11
77	Structural changes in air aged and poisoned diesel catalysts. Topics in Catalysis, 2007, 45, 137-142.	1.3	11
78	Microstructural Characteristics of Vehicle-Aged Heavy-Duty Diesel Oxidation Catalyst and Natural Gas Three-Way Catalyst. Catalysts, 2019, 9, 137.	1.6	11
79	Cracks and degradation layers in large flat-on-flat fretting contact with steels and cast iron. Tribology International, 2020, 145, 106102.	3.0	11
80	Review of railway track applications of Barkhausen noise and other magnetic testing methods. Insight: Non-Destructive Testing and Condition Monitoring, 2014, 56, 657-663.	0.3	10
81	Electron microscopic studies of natural gas oxidation catalyst â€“ Effects of thermally accelerated aging on catalyst microstructure. Journal of Catalysis, 2017, 349, 19-29.	3.1	10
82	Case Depth Prediction of Nitrided Samples with Barkhausen Noise Measurement. Metals, 2019, 9, 325.	1.0	10
83	Detailed Barkhausen noise and microscopy characterization of Jominy end-quench test sample of CF53 steel. Journal of Materials Science, 2020, 55, 4896-4909.	1.7	10
84	Automated Ultrasound-based Inspection of Rails: Review. International Journal of Railway, 2017, 10, 21-29.	0.2	10
85	Characterisation of case-hardened gear steel by multiparameter Barkhausen noise measurements. Insight: Non-Destructive Testing and Condition Monitoring, 2009, 51, 212-216.	0.3	9
86	Aerosol characterization and lung deposition of synthesized TiO2 nanoparticles for murine inhalation studies. Journal of Nanoparticle Research, 2011, 13, 2949-2961.	0.8	9
87	The effect of test parameters on the impact resistance of a stainless steel/rubber/composite hybrid structure. Composite Structures, 2014, 113, 469-475.	3.1	9
88	Statistical Evaluation of Barkhausen Noise Testing (BNT) for Ground Samples. Sensors, 2019, 19, 4716.	2.1	9
89	Characterization of Pt-based oxidation catalyst â€“ Deactivated simultaneously by sulfur and phosphorus. Journal of Catalysis, 2021, 397, 183-191.	3.1	9
90	AEM study of aluminum phosphate sealed plasma sprayed Al2O3 and Cr2O3 coatings. Journal of Materials Science Letters, 2003, 22, 463-466.	0.5	8

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91	Characterization of phosphorus poisoning on diesel exhaust gas catalyst components containing oxide and Pt. Topics in Catalysis, 2007, 45, 153-157.	1.3	8
92	Utilization of frequency-domain information of Barkhausen noise signal in quantitative prediction of material properties. AIP Conference Proceedings, 2014, , .	0.3	8
93	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.	1.0	8
94	Aminofunctional silane layers for improved copperâ€“polymer interface adhesion. Journal of Materials Science, 2011, 46, 6618-6626.	1.7	7
95	Characterisation of stainless steel surfaces â€“ modified in air at 350Â°C. Surface Engineering, 2011, 27, 325-331.	1.1	7
96	Characterisation of novel regenerated cellulosic, viscose, and cotton fibres and the dyeing properties of fabrics. Coloration Technology, 2015, 131, 396-402.	0.7	7
97	Case depth verification of hardened samples with Barkhausen noise sweeps. , 2014, , .		6
98	In vitro platelet activation, aggregation and plateletâ€“granulocyte complex formation induced by surface modified single-walled carbon nanotubes. Toxicology in Vitro, 2015, 29, 1132-1139.	1.1	6
99	The Impact of Sulphur, Phosphorus and their Co-effect on Pt/SiO2â€“ZrO2 Diesel Oxidation Catalysts. Topics in Catalysis, 2017, 60, 307-311.	1.3	6
100	Prediction of Residual Stresses Using Partial Least Squares Regression on Barkhausen Noise Signals. Journal of Nondestructive Evaluation, 2013, 33, 43.	1.1	5
101	The Characterization of Flame Cut Heavy Steel â€“ The Residual Stress Profiling of Heat Affected Surface Layer. Key Engineering Materials, 0, 674, 103-108.	0.4	5
102	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.	1.1	5
103	The effect of inferior turbinate surgery on ciliated epithelium: A randomized, blinded study. Laryngoscope, 2019, 129, 18-24.	1.1	5
104	Influence of the elementary mixing scale on HVOF-sprayed coatings derived from nanostructured aluminosilicate/mullite feedstock. Surface and Coatings Technology, 2008, 203, 335-344.	2.2	4
105	The Influence of Phosphorus Exposure on a Natural-Gas-Oxidation Catalyst. Topics in Catalysis, 2016, 59, 1044-1048.	1.3	4
106	Cracking and Failure Characteristics of Flame Cut Thick Steel Plates. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1744-1754.	1.1	4
107	The Effect of Sulphur and Water Treatments on the Performance of Pd/Î²-Zeolite Diesel Oxidation Catalysts. Topics in Catalysis, 2011, 54, 1185-1189.	1.3	3
108	An Attempt to Find an Empirical Model between Barkhausen Noise and Stress. Materials Science Forum, 0, 768-769, 209-216.	0.3	3

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109	Coating of Silica and Titania Aerosol Nanoparticles by Silver Vapor Condensation. Aerosol Science and Technology, 2015, 49, 767-776.	1.5	3
110	EFFECT OF ENVIRONMENT ON BROMOBUTYL RUBBERâ€“STEEL ADHESION. Rubber Chemistry and Technology, 2020, 93, 429-444.	0.6	3
111	Effect of carbon nanotubes and nanodiamonds on the heat storage ability of natural rubber composites. Journal of Elastomers and Plastics, 2021, 53, 311-322.	0.7	3
112			