

Javier Gil Sevillano

List of Publications by Year in descending order

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114
papers

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218677

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#	ARTICLE	IF	CITATIONS
1	Plastically-Induced Volume Deformation of Nanocrystalline $\hat{\pm}$ -Fe with a $\langle 110 \rangle$ Columnar Structure. <i>Metals</i> , 2020, 10, 1649.	2.3	0
2	Dynamic Steady State by Unlimited Unidirectional Plastic Deformation of Crystalline Materials Deforming by Dislocation Glide at Low to Moderate Temperatures. <i>Metals</i> , 2020, 10, 66.	2.3	9
3	A comparison of the internal stresses in a transformation-induced plasticity-assisted steel and a twinning-induced plasticity steel. <i>Materials Science and Technology</i> , 2019, 35, 409-419.	1.6	5
4	Effects of temperature and strain rate in strain hardening in torsion of a twinning-induced plasticity steel. <i>Materials Science and Technology</i> , 2019, 35, 669-679.	1.6	1
5	A comparison of the structure and mechanical properties of commercially pure tungsten rolled plates for the target of the European spallation source. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 70, 45-55.	3.8	1
6	Elasto-plastic behaviour of a columnar structure of nanocrystalline iron with sharp ~ 011 fibre texture. <i>Materialia</i> , 2018, 2, 218-230.	2.7	4
7	Un estudio adicional de la cin�tica de recristalizaci�n y crecimiento de grano del acero twip laminado en fr�o. <i>Revista De Metalurgia</i> , 2018, 54, 131.	0.5	3
8	New mesoscopic constitutive model for deformation of pearlitic steels up to moderate strains. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 219, 012010.	0.6	3
9	P�rdida de ductilidad debido a la descarburaci�n y p�rdida de Mn de un acero TWIP de tama�o de grano grosero. <i>Revista De Metalurgia</i> , 2017, 53, 109.	0.5	4
10	Atomistic simulation of the elongation response of a $\langle 011 \rangle$ oriented columnar nano-grain bcc Fe polycrystalline sample. <i>Meccanica</i> , 2016, 51, 401-413.	2.0	4
11	Microcompression tests of single-crystalline and ultrafine grain Bi_{2Te_3} thermoelectric material. <i>Journal of Materials Research</i> , 2015, 30, 2593-2604.	2.6	14
12	Numerical analysis of the indentation size effect using a strain gradient crystal plasticity model. <i>Computational Materials Science</i> , 2014, 82, 314-319.	3.0	10
13	Structure and texture of twin roll cast strips of Zn-Cu-Ti zinc alloy. <i>Materials Science and Technology</i> , 2014, 30, 91-95.	1.6	5
14	Propiedades mec�nicas a tracci�n y mecanismos de endurecimiento de un acero TWIP a altas velocidades de deformaci�n: relaci�n de Hall-Petch. <i>Revista De Metalurgia</i> , 2014, 50, e031.	0.5	4
15	Nanoporous gold periodical linear patterns obtained by laser interference thermal treatment. <i>Thin Solid Films</i> , 2013, 548, 69-74.	1.8	2
16	Propiedades mec�nicas del telururo de bismuto (Bi_2Te_3) procesado mediante torsi�n bajo alta presi�n (HPT). <i>Bolet�n De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2013, 52, 137-142.	1.9	9
17	Assessment of elastic anisotropy and incipient plasticity in Fe_3C by nanoindentation. <i>Journal of Materials Research</i> , 2012, 27, 45-52.	2.6	24
18	Internal stresses and the mechanism of work hardening in twinning-induced plasticity steels. <i>Scripta Materialia</i> , 2012, 66, 978-981.	5.2	43

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19	Towards a reliable procedure for the measurement of elastic modulus in instrumented indentation. <i>Philosophical Magazine</i> , 2011, 91, 1400-1408.	1.6	2
20	Diffusional Monte Carlo model of liquid-phase sintering. <i>Mathematics and Computers in Simulation</i> , 2011, 81, 2564-2580.	4.4	5
21	Geometrical Monte Carlo model of liquid-phase sintering. <i>Mathematics and Computers in Simulation</i> , 2010, 80, 1469-1486.	4.4	11
22	Fatigue Behavior of Four High-Mn Twinning Induced Plasticity Effect Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010, 41, 1102-1108.	2.2	48
23	Plastic deformation by conservative shear-coupled migration of tilt boundaries with intergranular nano-cracks or precipitates. <i>Philosophical Magazine</i> , 2010, 90, 3743-3756.	1.6	5
24	Size Effect in the Shear-Coupled Migration of Grain Boundaries Pinned by Triple Junctions. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1224, 1.	0.1	0
25	Mode II loading behaviour of intergranular cracks lying on a $\{17(530)/[001]$ symmetrical tilt boundary in copper. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 2107-2112.	0.8	2
26	Micromechanical model of 3D cross-ply copper matrix composite reinforced with SiC fibres. <i>Engineering Failure Analysis</i> , 2009, 16, 2559-2566.	4.0	2
27	In situ Neutron Diffraction Study of Internal Microstresses Developed by Plastic Elongation in α -Fe-10%Ni-5%Al-5%Cu-5%Cr-5%Ni-5%Ti-5%Zr Alloy. <i>Advanced Engineering Materials</i> , 2008, 10, 951-954.	3.5	15
28	Electro-discharge machining (EDM) versus hard turning and grinding—Comparison of residual stresses and surface integrity generated in AISI O1 tool steel. <i>Journal of Materials Processing Technology</i> , 2008, 195, 186-194.	6.3	79
29	Critical examination of strain-rate sensitivity measurement by nanoindentation methods: Application to severely deformed niobium. <i>Acta Materialia</i> , 2008, 56, 884-893.	7.9	106
30	Geometrically necessary twins and their associated size effects. <i>Scripta Materialia</i> , 2008, 59, 135-138.	5.2	41
31	On the elastic effects in power-law indentation creep with sharp conical indenters. <i>Journal of Materials Research</i> , 2008, 23, 182-188.	2.6	19
32	HARD TURNING PLUS GRINDING—A COMBINATION TO OBTAIN GOOD SURFACE INTEGRITY IN AISI O1 TOOL STEEL MACHINED PARTS. <i>Machining Science and Technology</i> , 2008, 12, 15-32.	2.5	9
33	White layers generated in AISI O1 tool steel by hard turning or by EDM. <i>International Journal of Machining and Machinability of Materials</i> , 2008, 4, 287.	0.1	5
34	Molecular dynamics simulation of crack tip blunting in opposing directions along a symmetrical tilt grain boundary of copper bicrystal. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 1008-1015.	3.4	21
35	Roughness of a mode I in-plane crack front propagating along a heterogeneous cohesive interface. <i>Journal of Computer-Aided Materials Design</i> , 2007, 14, 15-24.	0.7	3
36	Rapid Transformation Annealing: a Novel Method for Grain Refinement of Cold-Rolled Low-Carbon Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 1882-1890.	2.2	50

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37	Adhesion studies in integrated circuit interconnect structures. <i>Engineering Failure Analysis</i> , 2007, 14, 349-354.	4.0	14
38	Comments on "Comment on the determination of mechanical properties from the energy dissipated during indentation" by J. Malzbender [<i>J. Mater. Res.</i> 20, 1090 (2005)]. <i>Journal of Materials Research</i> , 2006, 21, 302-305.	2.6	23
39	Atomistic simulation of tensile strength and toughness of cracked Cu nanowires. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2006, 29, 615-622.	3.4	17
40	Fracture characterization in patterned thin films by cross-sectional nanoindentation. <i>Acta Materialia</i> , 2006, 54, 3453-3462.	7.9	39
41	Detailed assessment of indentation size-effect in recrystallized and highly deformed niobium. <i>Acta Materialia</i> , 2006, 54, 3445-3452.	7.9	22
42	Adhesion Studies in Low-k Interconnects Using Cross Sectional Nanoindentation. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	1
43	The heterogeneous nature of slip in ice single crystals deformed under torsion. <i>Philosophical Magazine</i> , 2006, 86, 4259-4270.	1.6	29
44	Strain Rate Sensitivity of Superplastic Inconel 718. <i>Materials Transactions</i> , 2005, 46, 1711-1719.	1.2	19
45	Stage IV: Microscopic or Mesoscopic Effect?. , 2005, , 65-71.		0
46	Measurement and modelling of residual stresses in straightened commercial eutectoid steel rods. <i>Acta Materialia</i> , 2005, 53, 4415-4425.	7.9	27
47	Optimal SPD Processing of Plates by Constrained Groove Pressing (CGP). , 2005, , 491-497.		1
48	Simulation of the microstructural evolution during liquid phase sintering using a geometrical Monte Carlo model. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2005, 13, 1057-1070.	2.0	14
49	Absence of one-to-one correspondence between elastoplastic properties and sharp-indentation load-penetration data. <i>Journal of Materials Research</i> , 2005, 20, 432-437.	2.6	107
50	Medida de la dureza de sólidos mediante nanoindentación. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2005, 44, 259-264.	1.9	2
51	Measuring the strain rate sensitivity by instrumented indentation. Application to an ultrafine grain (equal channel angularly pressed) eutectic Sn-Bi alloy. <i>Journal of Materials Research</i> , 2004, 19, 282-290.	2.6	24
52	Residual Stresses in Cold-drawn Pearlite Rods by High Energy Synchrotron Radiation and Thermal Neutron Diffraction. <i>Journal of Neutron Research</i> , 2004, 12, 175-180.	1.1	0
53	Ductilization of nanocrystalline materials for structural applications. <i>Scripta Materialia</i> , 2004, 51, 795-800.	5.2	71
54	Hall-Petch behaviour induced by plastic strain gradients. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 365, 186-190.	5.6	27

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55	Residual stress profiling in the ferrite and cementite phases of cold-drawn steel rods by synchrotron X-ray and neutron diffraction. <i>Acta Materialia</i> , 2004, 52, 5303-5313.	7.9	81
56	A novel method of analysis of superplastic behaviour. <i>Materials Letters</i> , 2004, 58, 3052-3057.	2.6	3
57	Modificación de las texturas y de los Índices de embutibilidad de chapas de aleaciones de aluminio Al 1050 y Al-Mg 5754 mediante laminación asimétrica. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2004, 43, 175-178.	1.9	2
58	A comparison of FEM and upper-bound type analysis of equal-channel angular pressing (ECAP). <i>Journal of Materials Processing Technology</i> , 2003, 141, 313-318.	6.3	79
59	On the impossibility of multi-pass equal-channel angular drawing. <i>Scripta Materialia</i> , 2002, 47, 13-18.	5.2	24
60	Intrinsic size effects in plasticity by dislocation glide. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 309-310, 393-405.	5.6	75
61	Size effects in powder compaction. <i>Journal of Materials Research</i> , 2001, 16, 1238-1240.	2.6	4
62	ECAE, una tecnología de procesamiento emergente para producir propiedades relevantes en materiales metálicos. <i>Revista De Metalurgia</i> , 2001, 37, 673-692.	0.5	5
63	Intrinsic and Extrinsic Size Effects in Plasticity by Dislocation Glide. <i>Materials Research Society Symposia Proceedings</i> , 2000, 653, .	0.1	0
64	Intrinsic and Extrinsic Size Effects in Plasticity by Dislocation Glide. <i>Materials Research Society Symposia Proceedings</i> , 2000, 653, 1.	0.1	0
65	Estructura y textura de un meteorito metálico de tipo octaedrita (Gibeon). <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2000, 39, 313-318.	1.9	3
66	Enriquecimiento en Si mediante PVD de chapas magnéticas convencionales para aplicaciones a altas frecuencias. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2000, 39, 351-354.	1.9	0
67	Caracterización de la adhesión en películas delgadas mediante nanoindentación. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2000, 39, 319-322.	1.9	0
68	Cross-sectional nanoindentation: a new technique for thin film interfacial adhesion characterization. <i>Acta Materialia</i> , 1999, 47, 4405-4413.	7.9	124
69	Modelling the evolution of residual stresses during tensile testing of elastoplastic wires subjected to a previous bending operation. <i>International Journal of Mechanical Sciences</i> , 1999, 41, 1031-1050.	6.7	13
70	Si enrichment of conventional electrical steel by means of physical vapour deposition. <i>Scripta Materialia</i> , 1999, 41, 729-735.	5.2	6
71	Texture and large strain deformation microstructure. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1999, 357, 1603-1619.	3.4	17
72	Fragmentation of as-drawn pearlitic steel wires during torsion tests. <i>Engineering Fracture Mechanics</i> , 1998, 60, 255-272.	4.3	16

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73	Ciels de Van Gogh et propri��t��s m��caniques. European Physical Journal Special Topics, 1998, 08, Pr4-155-Pr4-165.	0.2	5
74	La intercara fibra-matriz de un compuesto CMC de SiC-SiC: Comparaci��n de im��genes SEM, TEM y AFM. Revista De Metalurgia, 1998, 34, 226-231.	0.5	0
75	Lithic tool making by Amazonian palaeoindians: a case-study on materials selection. Journal of Materials Science Letters, 1997, 16, 465-468.	0.5	3
76	Interface stability under biaxial loading of bilayered sheets between rigid surfaces��I. Bifurcation analysis. International Journal of Solids and Structures, 1997, 34, 603-623.	2.7	6
77	Interface stability under biaxial loading of bilayered sheets between rigid surfaces��II. Stability of perturbations. International Journal of Solids and Structures, 1997, 34, 625-638.	2.7	0
78	Safety maps in bimetallic extrusions. Journal of Materials Processing Technology, 1996, 60, 133-140.	6.3	8
79	A fracture condition based on the upper bound method for the extrusion of bimetallic tubes. Journal of Materials Processing Technology, 1996, 61, 265-274.	6.3	25
80	An analysis of the extrusion of bimetallic tubes by numerical simulation. International Journal of Mechanical Sciences, 1996, 38, 157-173.	6.7	33
81	An analytical approach to the stress field in the extrusion of bimetallic tubes. International Journal of Solids and Structures, 1996, 33, 2075-2093.	2.7	11
82	Two-dimensional sections of the yield locus of a Ti��6%Al��4%V alloy with a strong transverse-type crystallographic ��-texture. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 201, 103-110.	5.6	45
83	The influence of the primer layer on mechanical damage and loss of corrosion protection of deformed painted Zn-0.16% Al and Zn-5% Al galvanized sheet steel. Corrosion Science, 1995, 37, 79-95.	6.6	16
84	Plastic flow of a two-phase solid-liquid metallic system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 175, 159-166.	5.6	0
85	Modelling cleavage fracture of bainitic steels. Acta Metallurgica Et Materialia, 1994, 42, 2057-2068.	1.8	80
86	How a stable crack extension changes the Weibull modulus of cleavage fracture probability. International Journal of Fracture, 1993, 62, R19-R27.	2.2	0
87	The Cold Worked State. Materials Science Forum, 1993, 113-115, 19-28.	0.3	7
88	Patterns in heavily deformed metals. Physica Scripta, 1993, T49B, 405-411.	2.5	9
89	Consolidation, microstructure and mechanical properties of newly developed TiB2-Based materials. Scripta Metallurgica Et Materialia, 1992, 26, 957-962.	1.0	24
90	Fracture toughness of W heavy metal alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1992, 157, 151-160.	5.6	23

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91	The fractal nature of gliding dislocation lines. Scripta Metallurgica Et Materialia, 1991, 25, 355-360.	1.0	48
92	Substructure and strengthening of heavily deformed single and two-phase metallic materials. Journal De Physique III, 1991, 1, 967-988.	0.3	38
93	Toughness and Fatigue Crack Growth Rate of Textured Metals. Textures and Microstructures, 1990, 12, 77-87.	0.2	1
94	Life prediction of thermally cracked railway wheels: Growth estimation of cracks with arbitrary shape. Theoretical and Applied Fracture Mechanics, 1988, 9, 123-139.	4.7	10
95	A quantitative assessment of forest-hardening in f.c.c. metals. Acta Metallurgica, 1987, 35, 631-641.	2.1	44
96	Low energy dislocation structures in highly deformed materials. Materials Science and Engineering, 1987, 86, 35-51.	0.1	88
97	Microfracture of polycrystals and the Bishop & Hill stress states. Scripta Metallurgica, 1986, 20, 1111-1114.	1.2	6
98	Overview no. 50. Acta Metallurgica, 1986, 34, 1473-1485.	2.1	10
99	FATIGUE CRACK PATH IN MEDIUM-HIGH CARBON FERRITE-PEARLITE STRUCTURES. , 1984, , 2073-2079.		1
100	Dynamic subgrain coalescence during low-temperature large plastic strains. Journal of Materials Science, 1984, 19, 423-427.	3.7	11
101	Comments on a paper by Hartley and Åœnal. Scripta Metallurgica, 1984, 18, 417-418.	1.2	0
102	âœœMicrobandsâœœ in Cold Worked Metals. , 1982, , 547-552.		2
103	A transmission electron microscopy study of lath martensite habit planes in Fe-Cu alloys. Materials Science and Engineering, 1980, 43, 109-113.	0.1	2
104	Large strain work hardening and textures. Progress in Materials Science, 1980, 25, 69-134.	32.8	716
105	On the Yield and Flow Stress of Lamellar Pearlite. , 1979, , 819-824.		19
106	The transformation substructure of quenched iron-copper alloys. Metallography, 1979, 12, 215-223.	0.4	3
107	Efficiency of directional transformation on the oriented growth of eutectoid alloys. Materials Science and Engineering, 1978, 34, 7-12.	0.1	0
108	Unusual slip systems on high purity aluminium single-crystals. Scripta Metallurgica, 1978, 12, 169-174.	1.2	0

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109	The contribution of macroscopic shear bands to the rolling texture of FCC metals. Scripta Metallurgica, 1977, 11, 581-585.	1.2	64
110	Inhomogeneity in the stored energy of deformed BCC-metals. Scripta Metallurgica, 1976, 10, 775-778.	1.2	9
111	Room temperature plastic deformation of pearlitic cementite. Materials Science and Engineering, 1975, 21, 221-225.	0.1	71
112	Heterogeneous Deformation and Internal Stresses Developed in BCC Wires by Axisymmetric Elongation. Materials Science Forum, 0, 550, 75-84.	0.3	18
113	Kinetics of Recrystallization and Grain Growth of Cold Rolled TWIP Steel. Advanced Materials Research, 0, 89-91, 153-158.	0.3	27
114	Hall-Petch Relationship of a TWIP Steel. Key Engineering Materials, 0, 423, 147-152.	0.4	60